

QUEENSLAND.

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REPORT AND RECOMMENDATIONS

FOLLOWING ON

AN ECONOMIC INVESTIGATION

BY

THE LAND ADMINISTRATION BOARD

OF THE

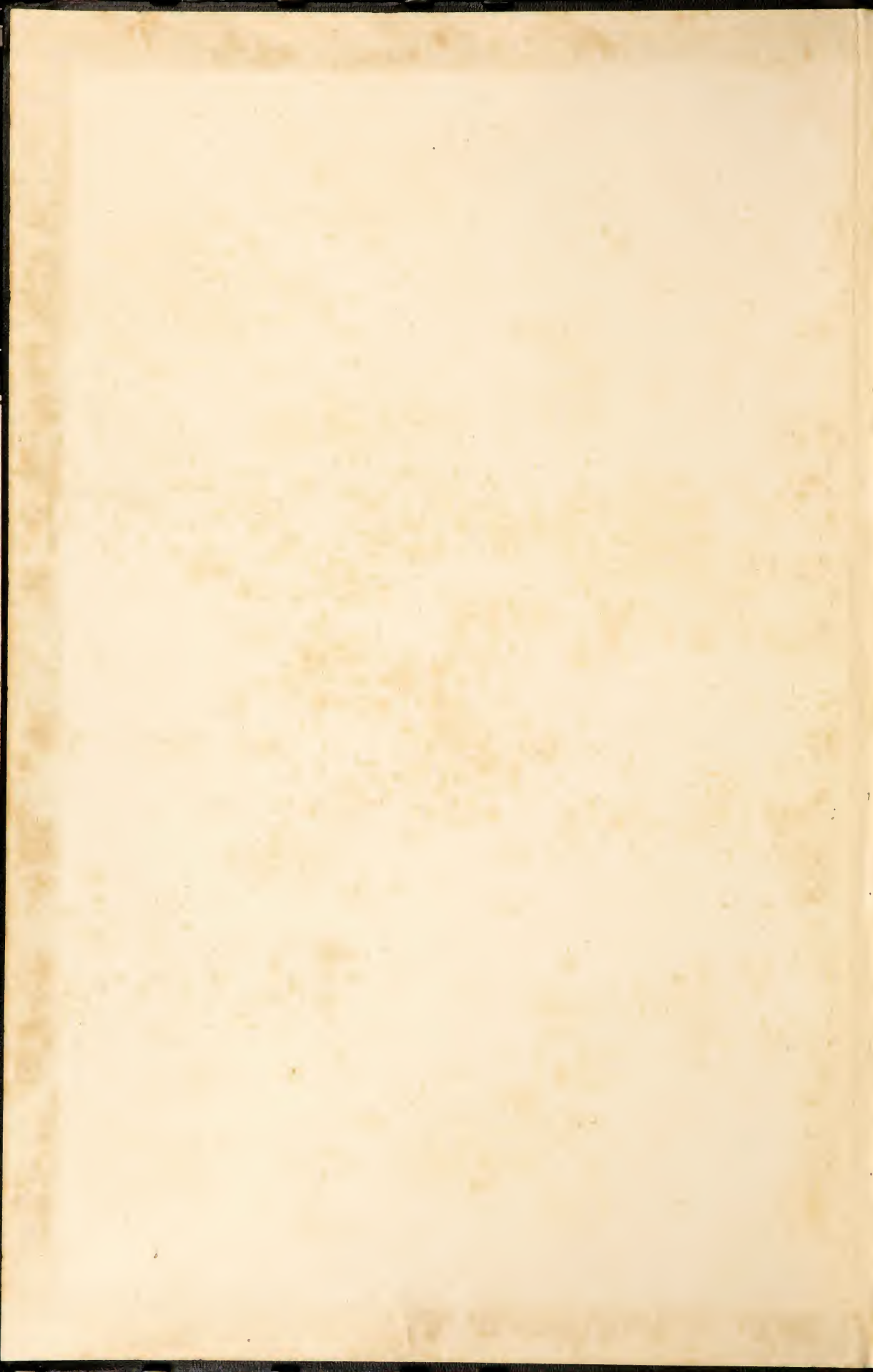
UPPER BURNETT AND CALLIDE VALLEY  
LANDS

AND OF THE

OPERATIONS OF "THE UPPER BURNETT AND CALLIDE LAND  
SETTLEMENT ACT OF 1923."

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W. L. PAYNE



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# REPORT AND RECOMMENDATIONS ON THE UPPER BURNETT AND CALLIDE VALLEY LANDS.

*Being a Report and Recommendations by the Land Administration Board following on an Economic Investigation made by the Board of the Upper Burnett and Callide Valley Land Settlement Scheme, and of the Operations of "The Upper Burnett and Callide Land Settlement Act of 1923."*

TO THE HONOURABLE THE SECRETARY FOR PUBLIC LANDS.

Office of the Land Administration Board,  
Brisbane, 29th May, 1929.

We have to advise that we have made a careful investigation of the Upper Burnett and Callide Valley Settlement Scheme, and now have the honour to submit the following Report and Recommendations:—

## GENESIS OF INQUIRY.

The Land Administration Board took office on the 1st February, 1928. It was appointed mainly for the purpose of administering "*The Land Acts Amendment Act of 1927*," which dealt mostly with grazing lands, and which was designed to assist the Sheep Grazing Industry to overcome the effects of the drought and economic difficulties with which the industry was faced. The first duty of the Board, therefore, lay in grazing areas, but other important matters were noted for attention as opportunity offered. Amongst these was the Upper Burnett and Callide Valley Land Settlement Scheme.

I.—  
First duty of  
Board.

This settlement scheme is the most ambitious land settlement project in Queensland's history, and, as originally conceived, was intended to provide farms for some thousands of settlers who would engage in mixed farming. When the Board was appointed, the scheme had been in operation for about four years; the whole of the first and second sections of the lands had been made available for selection; the third section had not been dealt with. In these circumstances the Board felt the need of carefully investigating the whole project to make sure that the foundations of the settlement were soundly laid before releasing more land for selection.

II.—  
Need for  
attention to  
Upper  
Burnett  
scheme.

The Upper Burnett lands are comprised within the Gayndah Land Agent's District, and the Callide Valley Lands within the Rockhampton District. Jurisdiction over the lands, therefore, was divided between the Land Commissioners at Gayndah and Rockhampton respectively. In order to secure co-ordination in all field work and to harmonise the general administration of the settlement, the late Government, in April 1928, on the recommendation of the Board, appointed a Field Superintendent with jurisdiction over the whole area, and directly responsible to the Board at Brisbane.

III.—  
Early  
administra-  
tive reform.



IV.—  
Personal  
investigation  
by Board.

Having completed the more urgent adjustments of Grazing Selection tenures in terms of the 1927 Land Act, the Board, in February last, decided to proceed to the Burnett and to personally investigate the economic position of the settlement, in order to lay down definite principles of administration for the future.

Before reporting on this investigation it will be necessary to give a brief history of the settlement.

### HISTORY OF SETTLEMENT.

I.—  
Locality of  
lands.

The Upper Burnett and Callide Valley lands extend from near Eidsvold on the south to near Rannes on the north, a distance of about 120 miles, and have an average width of about 40 miles. Although termed a "Valley," the area has an elevation varying from 800 to 1,700 feet.

The accompanying map shows the situation of the lands and the railways by which they are served. A map on a larger scale, showing the features of the country in greater detail and also the land selected and the land still available for settlement, is attached as Appendix G.

II.—  
Character  
of country.

The country embraces all classes of land from rich agricultural soils contained in many of the creek flats to third class grazing land, comprising coarsely grassed mountainous country. The average rainfall is about 29 inches.

The classification of the land made by Staff Surveyors, before the settlement scheme was commenced, was as follows:—

	AGRICULTURAL.		GRAZING.	
	First Class.	Second Class.	First Class.	Second Class.
	Acres.	Acres.	Acres.	Acres.
Northern Burnett .. ..	186,000	400,000	498,000	336,000
Callide .. ..	104,000	391,000	90,000	488,000
Totals .. ..	290,000	791,000	588,000	824,000
Grand Total .. ..	2,493,000 acres.			

Much of the land classified as first class "grazing" land is eminently suited for dairying, as it contains many rich arable pockets. There are considerable belts of softwood and brigalow scrubs.

Altogether the area may be regarded as very well adapted for a successful closer settlement scheme.

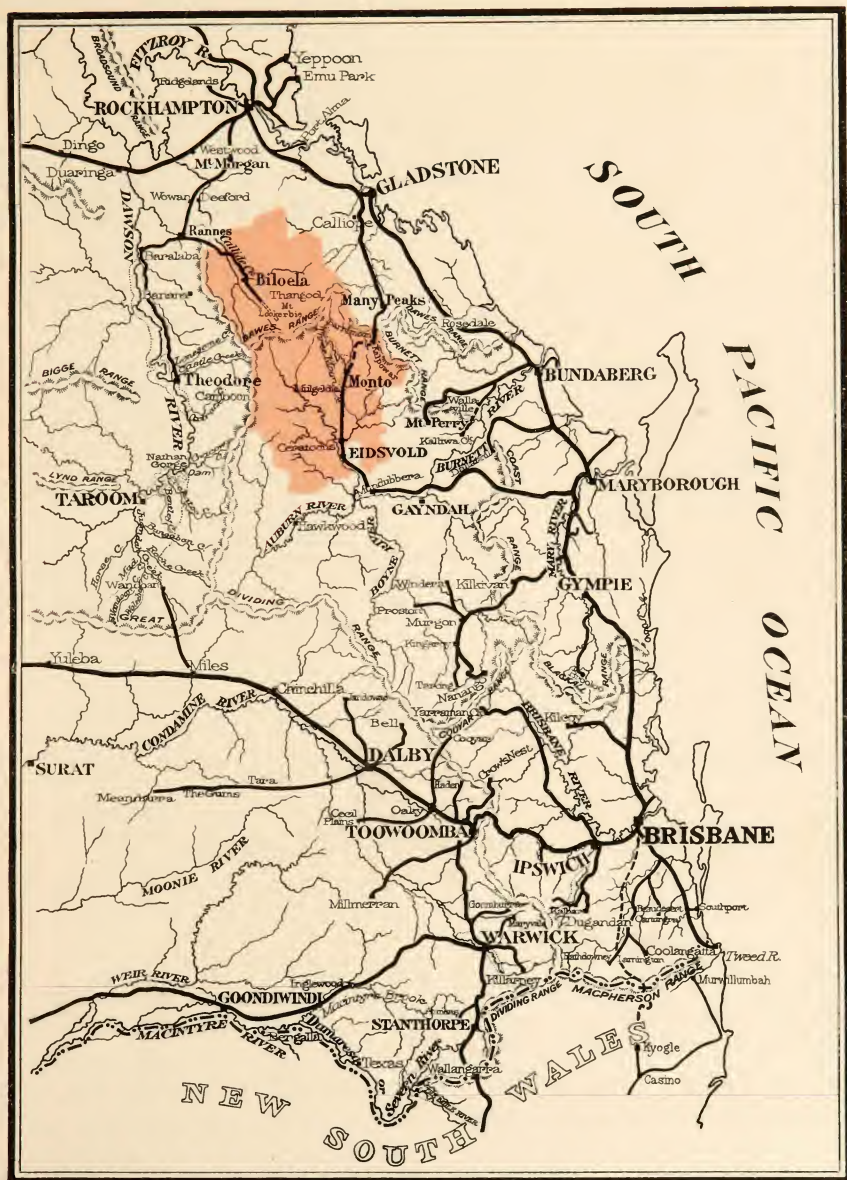
III.—  
Previous  
occupants of  
the land.

Before the advent of the settlement scheme the lands comprised in the Upper Burnett and Callide Valley were used almost solely for grazing and were mostly in the occupation of grazing selectors and pastoral lessees.

At the time of compulsory resumption the number of occupants was 133, and the largest individual holding was 168,960 acres in area.



# MAP OF THE UPPER BURNETT AND CALLIDE VALLEY LANDS.



Scale of Miles  
60 30 0 60 120  
Printed at the Govt. Print. Office Brisbane 1899

The total area in respect of which notice of resumption was given, and on which compensation was fixed by the Land Appeal Court, was :—

	Acres.
33 Freeholds .. .. .	31,563
168 Grazing Selections .. .. .	946,579
1 Agricultural Farm .. .. .	1,280
5 Prickly-pear Selections .. .. .	21,623
6 Pastoral Leases .. .. .	261,120
<b>Totals</b> 213	<b>1,262,165</b>

IV.—  
Resumptions  
for closer  
settlement.

Eventually resumptions were cancelled (or are in process of cancellation) in the case of 32 holdings, mostly grazing land, comprising an area of 113,275 acres, so that the holdings actually resumed number 181, comprising an area of 1,148,890 acres.

The area comprised in this settlement scheme is generally spoken of as about 3,000,000 acres. The exact figures are as follows :—

	Acres.
Resumed Land .. .. .	1,148,890
Crown Land (including expired Grazing Selections and Pastoral Holdings) .. .. .	1,262,944
<b>Total (not including roads and reserves)..</b>	<b>2,411,834</b>

V.—  
Area  
comprised in  
settlement  
scheme.

Compensation for the land resumed actually paid over by the Crown was :—

Leaseholds .. .. .	£173,263
Freeholds .. .. .	69,595
	<b>£242,858</b>

In addition there were Legal Fees and Costs amounting to .. 1,864

Total Cost of Resumptions .. .. . **£244,722**

Certain Resumptions were cancelled conditionally on the compensation money being refunded to the Crown. The amount refunded, or in process of refundment, is .. 11,678

Net Compensation paid .. .. . **£233,044**

VI.—  
Special  
expenditure  
incurred.  
(a) Land  
resumptions.

New railways were needed in order to open up this land. Without railway communication the Upper Burnett could not have been used for any industry other than grazing, and closer settlement would have been out of the question. For years prior to Parliament authorising the building of the railways, there had been great rivalry between Rockhampton, Gladstone, and Maryborough as to which branch railway should be extended to the country. Each centre was anxious to obtain the trade that was certain to flow from this rich area, and railways from each centre had already been constructed to the fringe of the proposed settlement. Existing railways reached from Rockhampton to Rannes, on the north, from Gladstone to Many Peaks on the east, and from Maryborough to Mundubbera on the south of the area.

(b) Railway  
construction.



Eventually Parliament authorised the extension of all three of these railways to converge on Monto, a new township in the centre of the area.

Monto lies 103 miles from Gladstone, 179 miles from Maryborough, and 172 miles from Rockhampton. Of the three railways, that connecting with Gladstone, although the shortest, was the most costly and difficult to construct, owing to the mountainous country (the Dawes Range) through which it passes. This railway has been completed to Dalkiel, and is at present under construction to Waratah, eight miles north-east of Monto. The Maryborough-Mundubbera extension is completed and open to traffic to Monto. The Rockhampton-Rannes extension is open to Thangool—63 miles north of Monto. Rails have been laid for a few miles beyond this point, and earthwork constructed still further to Mount Lookerbie, but all work has been discontinued.

Figures supplied by the Commissioner for Railways show that the cost of the three railways to 31st March, 1929, is as follows:—

Mundubbera to Monto (complete) .. .. .	£561,785
Many Peaks towards Monto (still under construction) .. ..	779,538
Rannes towards Monto (construction discontinued) .. ..	374,374
	<hr/>
	£1,715,697

(c) Roads  
and bridges

As part of the settlement scheme, the Department of Public Lands undertook to construct, free of cost to the Local Authorities, the necessary roads and bridges to give pioneer access to each holding. This work was commenced in 1923 and is still proceeding. After construction, the roads and bridges are handed over to the Local Authorities, who are responsible for their future maintenance.

In the early days of this work the Department did not possess adequate machinery, and many of the roads were indifferently formed. The present standard of work, which is done with the aid of modern plant, is, however, quite satisfactory, and settlers are being provided with reasonably good roads. The bridges throughout the area, constructed by the Lands Department, are first class structures.

Altogether 634 miles of road and five bridges and causeways have been constructed. The total expenditure on these works to 31st March, 1929, amounted to £78,523 12s. 7d. Detailed particulars are given later in a separate section of this Report dealing with Roads and Bridges.

VII.—  
Water  
facilities and  
Agricultural  
Bank  
advances.

Expenditure of Government Funds has also been incurred in the provision of water facilities for settlers and in advances by the Agricultural Bank for the assistance of settlers. Both these matters are referred to, in detail, in later sections of the Report. Expenditure to 31st March, 1929, under these heads, is as follows:—

Water facilities .. .. .	£73,760
Agricultural Bank advances .. .. .	£88,131

## NEW ROADS ON THE SETTLEMENT.



Section of road between Monto and Splinter Creek, Upper Burnett.



Another view of road, Monto to Splinter Creek, Upper Burnett.



Road through scrub country near Thangool, Callide Valley.

"As part of the settlement scheme, the Department undertook to construct, free of cost to the Local Authorities, the necessary roads and bridges to give pioneer access to each holding. The present standard of work which is done with the aid of modern plant is quite satisfactory, and settlers are being provided with reasonably good roads. The bridges throughout the area, constructed by the Lands Department, are first-class structures."—Page 8.

*Face Page 8.]*



This expenditure, however, stands in quite a different category to the other expenditure quoted above. In each instance the money advanced is in the nature of a loan to the settler, and ordinarily should be repaid by him with interest over a period of years. Excepting, therefore, the amount spent on "duffer" bores, or otherwise written off or lost in the provision of water facilities, and the amount lost through default of the tenants in observing the covenants of their Agricultural Bank mortgages, the above expenditure will be repaid to the Government. It should not, therefore, be debited to the initial cost of the settlement. Reference to the section of the Report dealing with water facilities will show, however, that considerable losses will be incurred under this head.

Summarising the expenditure that may fairly be debited to the initial cost of the settlement, we have the following:—

	£
Compensation for Land Resumptions .. .. .	233,044
Construction of Railways .. .. .	1,715,697
Construction of Roads and Bridges .. .. .	78,523
Total .. .. .	<u>£2,027,264</u>

VIII.—  
Summary of  
special  
expenditure.

Expenditure on railways, roads, and bridges is still continuing.

It will be seen from the above figures that modern settlement schemes are costly undertakings. If railways have to be pushed out ahead of settlement, if roads and bridges have to be constructed, and other Governmental aid granted to settlers, the burden of all this expenditure must, until the new settlement becomes productive, be carried by the general community.

IX.—  
Costly  
nature of  
modern  
settlement  
schemes.

In the present instance the expenditure amounts to £2,027,264. For that sum 1,108 persons have already been settled on the area, and the potential settlement capacity of the remaining land, on sound lines, is about 400 settlers. By the time the scheme is completed, therefore, considering that further expenditure has yet to be made on railways and roads, the cost will not be less than £1,500 per settler.

Some surprise may be occasioned by our estimate of 1,500 settlers for the whole area, because of the fact that official estimates in the past have exceeded this figure. However, the facts and reasons on which our estimate is based are fully disclosed in the following pages. Briefly, it may be said the reduced number is mainly due to the fact that larger areas than were originally contemplated are needed to effect sound and progressive settlement.

The large expenditure that has been incurred illustrates, in a striking way, the difference between old and new settlement schemes.

X.—  
The old  
method and  
the new.

In the early days of settlement a family would settle on the land, produce almost all its own requirements, and earn in actual money a very small income, which would be expended on articles which the farm could not produce. To live, rather than to earn or produce for the use

of others, was the dominating purpose. Now all this has changed. The modern view is that, unless the income received from the products of the farm can approximate the money that would be earned from similar energies elsewhere, there is no inducement to settle on the land.

In former days communities established themselves by years of arduous pioneering work with little outside assistance, and railways were provided only after the settlers had demonstrated the wealth productivity of their lands, and their capacity to provide the railways with considerable business. Now the position is reversed; public expenditure goes first and settlement follows. Such public expenditure must necessarily be unproductive for a few years.

#### XI.—

Settlement measures up to standard prescribed by British Economic Mission.

In dealing with settlement schemes the British Economic Mission, in its Report dated 7th January, 1929 (page 6), pointed out that such schemes, financed out of loan moneys, should be self supporting within a reasonable measure of time. The members of the Mission went on to say, "By this we mean that within such measure of time they should, either directly, or indirectly through the increased taxable capacity of the community and the enhanced value and price of Government-owned land attributable to the development schemes, provide at least their own working costs, interest on the loan capital invested in them, and a sinking fund sufficient to provide for its repayment when it falls due."

Judged on that basis, the Upper Burnett and Callide Valley Settlement Scheme may be regarded as a sound State investment. We think that, indirectly, it will return interest and redemption manifold.

#### XII.—

The scheme as measured in money

In the first place, on the lowest estimate that is possible, the land has increased in value considerably more than the total cost of the railways and roads that have developed it. We are not, however, impressed by this factor because the State will not receive this increased value. The land is settled on the Perpetual Leasehold system, the annual rent payable being only  $1\frac{1}{2}$  per cent. of its capital value. The Lands revenue from the settlement at the present time amounts to £15,934 per annum, and although with increased settlement this revenue will be augmented, it will not be substantially increased owing to the fact that we are making a number of recommendations for adjustments in rents.

Even if the Government allow settlers to convert to freehold, the purchasing price of the land, free from interest, will be spread over a period of from twenty to thirty years, and consequently there will not be much material gain to the Government from a revenue standpoint.

Much more important, in our opinion, than increased land values, is the wealth productivity of the land. When fully settled on the lines of our recommendations, we estimate the settlement will comprise 1,500 mixed farmers, dairymen, and graziers, and the annual production from the settlement will then probably exceed in value one million pounds sterling.

All the State expenditure, therefore, that has been incurred in the scheme must be considered in relation to the many advantages to the community of this increased annual production.



## LAND ADMINISTRATION BOARD AT WORK.

Proceedings everywhere marked by absence of formality.



Board sitting in Railway Waiting Room at Abercorn, and group of selectors waiting to present their cases.



Board taking evidence in blacksmith's shed, Mulgouldie.



Board hearing selectors under tent fly at Waratah.

"The individual witnesses were examined in private. . . ."  
"We have found, from experience, that though an economic investigation conducted in public may be picturesque, it is of very little real value. Witnesses will not disclose, in public, those intimate financial details of their operations, or bedrock facts, without which any attempt at an economic investigation becomes futile. Our aim, therefore, was to set the witnesses at ease, assure them that their evidence would be regarded as confidential, and then closely examine them on all material matters. In the result the witnesses gave us all the information we desired."—Page 12.

Face Page 10.]

But there is another and still more important way in which the matter may be measured—in persons rather than in money. Amongst the settlers many are to be found with large families. A number of the witnesses who gave evidence before us had families ranging from six to ten children. Allowing, however, for average families of three children, the Upper Burnett and Callide lands will directly support 7,500 people.

XIII.—  
The scheme  
as measured  
in  
population.

Now for every £1,000,000 of wealth produced from the land, it may be said, as a wide generalisation, that about one-third will find its way into the pockets of the producers, while two-thirds, as costs of production and general expenses, will be distributed amongst the community. Therefore, besides the 7,500 people maintained on the land, the distributed wealth will support a further 15,000 people, making 22,500 people all told.

Such is the value of this settlement scheme to Queensland.

Much is heard from time to time of progressive settlement schemes in Western Australia. It is surprising how ready some people are to make comparisons to the detriment of Queensland, while lacking even elementary knowledge of the subject being dealt with. For the information of those who like comparisons we reproduce in Appendix A an analysis of group settlements in Western Australia which appeared in the *London Times* of the 14th September last. It shows that expenditure on group settlements in that State has exceeded £4,000 per head, and that, even after such expenditure, the prospects of the settlers are still uncertain.

XIV.—  
Settlement  
failures in  
Western  
Australia

No comment by us is needed, except to say that we have verified this information from official sources.

Having discussed the matter in this general way, we will now proceed to give particulars of our Inquiry and to state in detail the conclusions we have reached regarding the future administration of the Upper Burnett and Callide Valley settlement.

#### PROCEEDINGS OF BOARD.

The Board opened its inquiry at Mundubbera on Thursday, 28th February last. Subsequently sittings were held at Eidsvold on the 2nd March, at Abercorn 4th March, Mulgeldie 5th, Monto 6th and 7th, Kalpowar 8th, Waratah 9th, Biloela 11th and 12th, Thangool 13th, Jambin 14th, Goovigen 15th March, and later at Brisbane.

I.—  
Sittings held.

In addition to hearing evidence, numerous inspections of holdings, vacant lands, and roads were made.

Altogether 339 witnesses were examined. Their notes of evidence, covering 664 pages of typewritten matter, have been bound into a separate volume and forwarded to the Hon. the Minister for Lands for his information. All witnesses were given an assurance that the financial details of their evidence would be regarded as confidential.

II.—  
Witnesses  
examined.

An alphabetical list of the witnesses is given in Appendix C.

In attending sittings and in making inspections the Board travelled 1,143 miles by motor-car.

III.—  
Miles  
travelled.



IV.—  
Proceedings  
in private.

The individual witnesses were examined in private. If the witnesses desired anyone else to be present, their wishes were respected; otherwise the Inquiry was not open to the public.

We have found, from experience, that though an economic investigation conducted in public may be picturesque, it is of very little real value. Witnesses will not disclose, in public, those intimate financial details of their operations, or bedrock facts, without which any attempt at an economic investigation becomes futile. Our aim, therefore, was to set the witnesses at ease, assure them that their evidence would be regarded as confidential, and then closely examine them on all material matters. In the result the witnesses gave us all the information we desired.

### THE MUNDUBBERA SETTLEMENT.

I.—  
Relevancy  
of the  
Mundubbera  
lands.

As already stated, our Inquiry opened at Mundubbera. This district is situated near the Upper Burnett district, and comprises a belt of forest and scrub country somewhat similar to the country of the Upper Burnett, and of approximately equal rainfall. The good lands in the latter area are, however, much more extensive than those of the Mundubbera district, which also has the disadvantage of pear infestation.

The Mundubbera lands were settled in a virgin condition about fifteen years ago without special Governmental aid other than the provision of pioneer access. The settlement is now well established and is prosperous. It seemed to us, therefore, that if the Mundubbera settlers would take us into their confidence, tell us the difficulties they had encountered, and the obstacles they had overcome, and give us details of the working of their holdings and of their financial position, our task in forming an accurate judgment on the soundness of the Upper Burnett project would be very much lightened. That is why the Inquiry was opened at Mundubbera.

II.—  
Acknowledg-  
ment of  
public  
service  
rendered  
by witnesses.

Twelve witnesses submitted themselves for examination in response to general invitations issued by the Board. A number of these witnesses were original settlers in the Mundubbera and adjacent districts. They were in occupation of different classes of country, and some came considerable distances to be present at the Inquiry. Their names are included in Appendix C.

We wish to acknowledge the sense of public service which prompted the attendance of these settlers to assist the Board. The settlers themselves had nothing to gain. The terms and conditions of their lands were not under review. They could hope for nothing from the Inquiry. Yet with obvious goodwill towards the administration they readily came forward to give the Board the benefit of their knowledge and experience.

Such disinterested co-operation is gratifying and worthy of acknowledgment.

III.—  
Facts  
established  
by  
Mundubbera  
evidence.

The evidence at Mundubbera, and our inspections and inquiries in the locality, establish the following:—

- (1) When originally settled, the area around Mundubbera allotted to each selector was too small. Most of the settlers started out without any monetary capital whatever and

## THE GROWTH OF MUNDUBBERA.

Successful land settlement and industrial progress are closely allied.



The main street, Mundubbera, 1914.



Mundubbera to-day.



Mundubbera Butter Factory.

“What Mundubbera has done, several centres throughout the Upper Burnett and Callide Valley may do better.”—Page 14.  
*Face Page 12.]*



many of them failed to succeed. Gradually, however, the size of holdings increased by aggregation, and now the settlement is established on a sound and prosperous basis. The selections are held as Agricultural Farms, on the freeholding system, as distinct from Perpetual Leases.

The original subdivision of the land was in areas of from 160 acres upwards. Taking an average it may be said that the areas should have been about doubled. A good living can be made from 300 acres of first-class scrub land, or from 500 acres of good forest land, with, say, 50 acres to 100 acres of cultivable land thereon.

Most of the successful farmers to-day hold two or three of the original blocks.

- (2) The original purchasing prices placed on the land by the Crown were somewhat high. They have, however, since been adjusted and reduced by the Prickly-pear Land Commission, under whose jurisdiction the land now is, and settlers seem quite satisfied and contented with the treatment they have received.
- (3) In the Mundubbera District, both the scrub and forest land is good sound, healthy, dairying country. There is also a considerable extent of first-class agricultural land.
- (4) In the case of scrub dairy farms it is desirable, and in the case of forest farms essential, that cultivation be maintained for feeding the milking cows in dry times and during the winter months, when the grasses have lost their succulence. Artificial grasses on scrub country, of course, keep succulent longer than natural grasses on forest land.
- (5) To get the best results, a dairyman on forest country should have under cultivation an area of about one acre per milking cow. The crops grown in the district for cow feed include lucerne, cowpea, maize, soudan grass, and imphee.

Instead of cutting and chaffing the feed, many farmers merely graze their milkers on the cultivation for a short time daily, which, of course, saves labour, but a larger area of cultivation is required.

- (6) From a dairying standpoint, the district compares favourably with the best dairying districts in the State. Witnesses who appeared before us had previous experience on the land, on the Downs, at Nerang, Lowood, Laidley, and Murgon. The consensus of opinion was that, with the aid of cultivation, a dairy herd in the Mundubbera district would return profits as good as in any of the other districts mentioned.
- (7) A few high-class pedigree milking herds are maintained in the district. In particular, the Illawarra stud of Messrs. Spoor Bros. has won many prizes at Brisbane Shows and other Agricultural Shows throughout Queensland.

- (8) The returns from dairying vary according to the grade of cow and the seasons. The highest return from ordinary dairy cows mentioned in evidence was 35s. per cow per month; the lowest was 12s. 6d. per cow per month. From the evidence we are satisfied that ordinary good grade dairy cows, with the aid of cultivated fodders, will return about £1 per cow per month throughout the year; that is a dairy farmer maintaining an average milking herd of 30 cows will receive a gross return from cream of about £360 per annum. The capital invested in such dairy farm, including dry cows and young stock, dwelling, improvements, and plant, would be about £1,750, exclusive of the value of the land.
- (9) A large co-operative butter factory is established at Mundubbera.

During the twelve months, 1st January, 1928, to 31st December, 1928, 942 tons of butter were manufactured at this factory. The total amount paid to suppliers for the twelve months was £134,703. Of this, the largest monthly amount was £16,966 for the month of January, and the smallest £5,883 for the month of June last. The average number of suppliers was 558. The returns, therefore, equal an average of £242 per supplier per annum. This return would be higher if confined to ordinary dairymen, excluding those suppliers who run only a few cows as a side line. Details are given in Appendix B.

- (10) The chief crops grown in the district for market are cotton, maize, and broom millet.
- (11) The railway returns for twelve months, 1st January, 1928, to 31st December, 1928, show that 1,885 tons of produce were despatched from Mundubbera, while the freight collected by the Railway Department on goods and live stock despatched amounted to £7,487. The inwards freight amounted to £8,559 for the same period.

IV.—  
What  
Mundubbera  
has done,  
the Upper  
Burnett may  
do better.

It will be clear from the above facts and figures that Mundubbera is now a prosperous mixed farming area. All qualities making for success in this district are present in greater measure in the lands of the Upper Burnett and Callide Valley. What Mundubbera has done, therefore, several centres throughout the Upper Burnett and Callide Valley may do better.

#### UPPER BURNETT AND CALLIDE VALLEY LANDS.

I.—  
Four  
determining  
factors in  
land  
settlement.

The four chief factors which determine the success or otherwise of a settlement scheme are:—

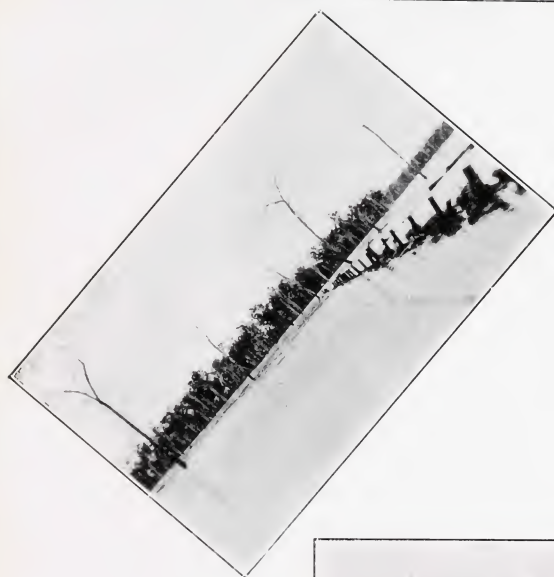
- (1) Quality and suitableness of the land and climate.
- (2) Character and suitableness of the settlers.
- (3) Markets for the products.
- (4) General administration.

We will deal with each of these matters in turn.



## THE MENACE OF FLOODS ON LOW-LYING LANDS.

Many of the flats throughout the Upper Burnett and Callide Valley are inundated for short periods by flood waters after heavy rains. These photos. were taken in different parts of the settlement.



"Generally, settlers have much more to fear from dry conditions than from excessive rains, unless they take steps to protect themselves by storing fodder. In average years the great bulk of the rich agricultural land in the district may be cultivated without losses by flood."—Page 16.

*Face Page 14.]*

## QUALITY AND SUITABLENESS OF THE LAND AND CLIMATE.

We have already expressed the opinion that the Upper Burnett and Callide Valley lands are eminently adapted for a successful closer settlement scheme.

I.—  
Land quite suitable for closer settlement.

Rich belts of country exist which bear comparison with anything to be found in other parts of Queensland, and, if closer settlement could not succeed on such an area, the outlook for increased primary production in Queensland would be dismal indeed.

But it must be remembered that the country is, or a few years ago was, largely virgin land, and, therefore, many years of concentrated effort will be needed to put this settlement in the same developed and established condition as the older closer settled districts of the State, such as for instance the South Coast, the Brisbane Valley, or the Wondai-Kingaroy areas.

II.—  
Prospects of districts are favourable compared with other closer settlement districts.

The progress that has already been made, and the towns that have been established throughout the area, speak well for the energy and enterprise of the people, and, in the course of time, there is no reason to doubt that this great new district will compare favourably in prosperity with the other districts mentioned.

The climate of the settlement is invigorating and healthy. Sheltered from the humidity of the coast by the Burnett and Dawes Ranges, the winds that come in from the Pacific are dry and keen. The winters are not unduly severe. The average annual rainfall, taken from official records at places scattered throughout the area, is about 29 inches.

III.—  
Climate and rainfall.

We are indebted to Mr. Joseph Ball, of Rosebank, Kalpowar, for a valuable private record over a period of 21 years, from 1908 to 1928 inclusive, of the rainfall at Rosebank, which is situated about 18 miles north-east of Monto. This record shows the daily and monthly rainfall throughout the whole of this period. The average is 33 inches. It will be noted that this average is greater than the average rainfall for the whole settlement, which is evidently accounted for by the nearness of the country to the Dawes Range.

So valuable do we consider this record to be that, for the information of settlers throughout the area, we have reproduced it in full in Appendix D.

The Upper Burnett and Callide Valley are served by the Burnett River, and many large creeks. On the southern watershed there are Splinter, Three Moon, Monal, Boogolgopal, Cattle, Trevethan, Small's, and other creeks, and the Rawbelle or Nogo River. On the northern watershed the creeks are Grevillea, Kariboe, Kroombit, Callide, and Bell. These creeks drain an extensive area of country, and in heavy rains the water overflows the banks and inundates the adjacent flat country. In places there is a considerable current.

IV.—  
Floods and dry seasons.

Reference to the rainfall record abovementioned will show that the years 1927 and 1928, and the early part of the current year, were exceptionally wet. In consequence floods were more severe than usual, and much damage was done on the rich alluvial flats adjacent to the creeks. Crops were damaged or destroyed, and fences were pushed over by debris brought down by flood waters. A number of settlers complained that their crops had been destroyed in three successive years.

The set back that such a happening would be to a new settler can readily be imagined. In fact, so disappointed were some that they have expressed their intention of not putting this flooded country into cultivation again.

We think that, generally, settlers have much more to fear from dry conditions, than from excessive rains, unless they take steps to protect themselves by storing fodder. In average years the great bulk of the rich agricultural land in the district may be cultivated without losses by flood.

#### CHARACTER AND SUITABLENESS OF SETTLERS.

I.—  
Settlers are a good type.

Of the 1,108 settlers who have been allotted portions, we met and discussed settlement problems with 339. Not more than five per cent. of this number are unsuited for facing the pioneering conditions of a new settlement. On the other hand, at each place visited we saw a number of hard-working progressive men, who are determined to succeed, and whose accomplishments to date are very creditable. These men will be a stabilising influence in the places where they are settled. The scheme will not fail for want of suitability of the settlers.

#### MARKETS AND PRICES FOR PRODUCTS.

I.—  
Variety of crops.

The land is capable of producing many and varied products such as different kinds of crops, cream, pigs, and fat stock. For the present cream and cotton are the principal products.

II.—  
Butter and cotton are chief products.

The problems of marketing the products from the area are no different from the general problems of marketing which face all primary production in the State. They need not, therefore, be specifically referred to in this Report.

As already mentioned the two chief products are butter and cotton. Butter is protected by the "Patterson scheme," under which the Australian consumer pays more for the butter he uses than World's parity. The tax the consumer thus pays equals about 4½d. per lb. on all butter exported.

The dairying industry is conducted not only in Queensland but in all the States of Australia; its operations are well known to Government Authorities, both State and Federal, and there is nothing exceptional in this district, regarding markets and prices, to which attention should be drawn.



## THE FOUNDATION OF MONTO.



Site of Monto, 1924, at the commencement of settlement.



Monto to-day.



The main street, Monto.

Less than five years old, Monto is a rising township, in picturesque country in the heart of the Upper Burnett. Surrounded by good dairying and agricultural land, Monto is destined to become the capital of the Upper Burnett and a country township of considerable importance.

*Face Page 16.]*

With cotton, however, the position is different. The Upper Burnett and Callide Valley and neighbouring districts are specially suited for the production of cotton. In fact they are the chief cotton producing centres of Queensland and Australia.

III.—  
Cotton  
production  
is going  
backwards.

The area under cultivation is, however, going backwards. Although definite figures for the 1929 season are not available, the evidence clearly establishes that, throughout these districts, the area of cotton at present being harvested is less than the preceding year, and the prospects are that smaller areas will be put under crop during the current year. In the circumstances we will give a brief outline of the Queensland Cotton Industry and explain the reasons for the downward tendency.

In the year 1919, the State Government, in order to encourage the growing of cotton in Queensland, instituted a system of guaranteed prices, definite intimation being given that the period of guarantee would be for five years, the rates of payment to be varied according to circumstances from time to time. During the first two years of the guarantee, a price of 5½d. per lb. was paid for all seed cotton harvested. During the subsequent years the maximum price ranged from 5½d. to 5d., and variations were made in the price according to the grade and staple length of the seed cotton. Up to and including the year 1923, the State Government had incurred a loss of £68,930 as a result of the guaranteed prices.

IV.—  
Early  
guaranteed  
prices for  
cotton.

From and including the year 1924, the Commonwealth Government agreed to share in the losses involved by the guarantee. The last year of guaranteed prices was 1926, the price for best grade being fixed at 5d. per lb. maximum, but in addition the Queensland Government paid ½d. per lb. as a special grant to growers, thus bringing the price for the best grade of cotton to 5½d. per lb.

In 1926 the Commonwealth Cotton Bounty Act was passed. It provides for a direct bounty on seed cotton of 1½d. per lb. on higher grades, and ¾d. per lb. on lower grades. The Act also provides for a bounty on cotton yarn made in Australia subject to at least 50 per cent. of Australian cotton being used in the manufacture of the yarn. The bounties are payable for five years from 16th August, 1926.

V.—  
The Com-  
monwealth  
Cotton  
Bounty Act.

The following figures, for which we are indebted to the Manager of the Queensland Cotton Board, indicate the fluctuations in cotton growing in Queensland, and the prices obtained by growers:—

VI.—  
Area and  
value of  
cotton crop.

Year.	Approximate Area under Crop.	Weight.	Average price per lb. (approx. only).	Total value of crop (on guaranteed or bounty prices).
	Acres.	Lb.	d.	£
1920 .. .. .	166	45,581	5½	1,038
1921 .. .. .	1,967	922,778	5½	21,145
1922 .. .. .	8,176	3,878,673	5½	88,466
1923 .. .. .	28,695	11,769,502	5½	264,399
1924 .. .. .	35,373	15,179,046	5	314,775
1925 .. .. .	40,000	18,296,507	4½	338,187
1926 .. .. .	36,000	9,007,148	*5	*188,989
1927 .. .. .	18,000	7,054,951	5	150,000
1928 .. .. .	24,970	12,218,036	4½	228,000

\* Includes State grant of ¼d. per lb.

It will be noticed that since 1924, when the payment to growers was made dependent on the grade of cotton produced, the proportion of low grade cotton harvested somewhat affected the average price per lb. received by the growers.

VII.—  
Amount of  
Common-  
wealth  
bounties  
paid.

The amount of Commonwealth bounty for the year 1927 was approximately £43,000, and for the year 1928, £76,000. This equals a bounty of approximately 40 per cent. and 50 per cent. respectively on the value of the crop. The protection already granted is, therefore, considerable, though the evidence before us clearly establishes that it is insufficient if the industry is to survive.

VIII.—  
Is the cotton  
industry  
worth  
establishing?

What is the value of the cotton industry to Queensland, and is it worth establishing as an integral part of the life of the State? The Cotton Board answers this query with the following comment:—

“Already this young industry is playing an important part in the life of the community. With the production of slightly over 12,000,000 lb. of seed cotton in the 1928 season, more than 4,000 pickers were employed, exclusive of family labour. The wages bill is a big one. The payment to the railways for transport charges was approximately £8,000. Further moneys have been paid in connection with the handling of lint for export, and the ginneries and oil mills of the British Australian Cotton Association employed during the season about 120 employees. In addition, this company pays away other large sums of money for cartage, handling, and shipping charges on cake and oil. In the face of these facts it is easy to visualise the very great influence for good which an extensive cotton industry would have on the community in general.

A quadrupling of the present crop is possible within a very short space of time. This increase in the crop, however, can only be brought about by sales of lint to Australian spinners. This would mean an additional annual income of £600,000. The effect of this increased wealth upon the relieving of unemployment and upon the important national questions of development and migration is difficult to measure.

If the industry is worth establishing, and this we contend is unquestionable, then due regard must be had to the fact that adequate assistance is necessary during the experimental stage. When one has regard to the fact that the American industry has been in existence 100 years, it is obvious that the Australian industry, which has only been in existence a few short years, has not yet emerged from the experimental stage.”

IX.—  
Stabilisation  
of prices  
essential.

For the Callide Valley the matter of the survival of the cotton industry is of great importance. The foundation of that district, much more so than the Upper Burnett, was based on the growing of cotton. Cotton originally attracted most of the settlers to the land. Cotton kept them going. Cotton established the towns of Biloela and Thangool. If, therefore, unsatisfactory prices now compel the abandonment or considerable curtailment of the industry, a serious blow will be dealt the district. Everywhere it was noticeable that there is almost a scramble on the part of cotton growers, who have or can obtain finance, to go in for dairying because of the greater measure of stability that pertains to the dairying industry.

Cotton growing, as an industry, must surely and quickly decline unless means can be found to stabilise prices, and ensure a reasonable return to the grower.





If means could be found to increase the return by 1d. per lb., making an average of about  $5\frac{1}{2}$ d. per lb., which was the price originally guaranteed by the Queensland Government, the area under cultivation would be largely increased, and the industry would have unlimited possibilities of expansion in this fertile tract of country. At that price, if only an average crop were obtained, the farmer would receive a small, but not insignificant, profit, while, on the other hand, if he were fortunate enough to secure a good crop of two bales to the acre, he would receive a handsome return for his labour.

XI.—  
Comparison  
of picking  
costs—  
Queensland  
and America.

Analysing the production costs quoted above it will be found that the heaviest item is that for picking the cotton. This costs 2d. per lb. In the United States of America, the chief cotton producing centre in the world, the cost of harvesting seed cotton is only slightly over  $\frac{1}{2}$ d. per lb. How, then, can Queensland compete without heavy protection?

Doubtless this low American cost of harvesting is the chief reason why inventive genius has not been invoked to provide a satisfactory mechanical picker. While a mechanical picker is not needed in the cotton belt of America, where low wages and deplorable industrial conditions prevail, such a machine in Queensland, if it enabled cotton to be harvested at, say 1d. per lb., might well be the salvation of the industry.

XII.—  
Common-  
wealth  
Government  
now  
considering  
action.

Various proposals have been submitted to the Commonwealth Government by the Queensland Cotton Board and by cotton manufacturers to help the growing and manufacturing industries over the difficulties with which they are faced, due to competition from overseas.

These proposals may be summarised as follows:—

- (a) Duty on raw cotton and linters to be imposed so as to ensure the purchase of the Australian article by spinners.
- (b) Deferred duty on cotton yarn to be made effective.
- (c) Duty on cotton wadding and oils to be increased.
- (d) Bounty to be given on percentage yarn.
- (e) Bounty on cotton yarn to be increased.

The Commonwealth Tariff Board has inquired into these matters, and has reported thereon to the Commonwealth Government, which now has them under consideration.

Unless a decision is given immediately, which will indicate to the growers that they will receive more than an average of  $4\frac{1}{2}$ d. per lb. for their seed cotton, there will be a marked shrinkage in the acreage of cotton planted this season.

## GLIMPSES OF THE UPPER BURNETT.



A field of cotton, Waratah.



"Kerwee," a residence on the settlement.



The start of a new township on the Many Peaks-Monto Line, 13 miles north-east from Monto.  
The first building erected is the railway station-master's house.



## GENERAL ADMINISTRATION.

Matters of general administration in regard to the Settlement will be discussed under the following main headings :—

I.—  
Matters  
discussed.

- (1) Sound Settlement Areas.
- (2) Additional Areas for Settlers.
- (3) Capital Values and Rents.
- (4) Freehold Tenure *v.* Perpetual Lease.
- (5) Water Facilities for Settlers.
- (6) Roads and Bridges.
- (7) Operations of the Agricultural Bank.
- (8) Immigration Settlement.
- (9) Prickly-pear Land.
- (10) Departmental Organisation.

## SOUND SETTLEMENT AREAS.

In determining sound settlement areas it is first necessary to have regard to the purpose for which the land will be used. This land may be used for agriculture or dairying.

I.—  
Areas should  
be deter-  
mined on  
dairying  
basis.

To carry on agriculture successfully, assuming there is a satisfactory market, requires a smaller area than does dairying, but we think it would be very unwise to found this settlement on an agricultural basis only. Not only does agriculture require the best quality of land and assured rains, but the settler must wait a whole year for his returns. Moreover, the future of cotton is not certain, and the market for other agricultural products fluctuates enormously.

Dairying, on the other hand, can be successfully conducted on indifferent land, so long as a reasonable area of cultivation is available. It gives a regular monthly return; it has a stabilised market, and insurance against dry seasons can be provided by the conservation of fodder. We think that the areas of this settlement should be determined on a dairying basis, rather than force the settler into an inevitable gamble on agriculture, dependent as it is on seasons, markets, and prices.

Considered in this way we are of the opinion that, on an average, the areas are too small. Some of the portions are large enough, while others are quite inadequate to provide a reasonable living for the settler. The mistake that was originally made in the Mundubbera subdivisions has been repeated, though, fortunately, not to the same extent.

II.—  
Many of  
existing  
areas are too  
small.

For successful settlement some of the portions will need to be doubled in area, others increased by 50 per cent., while a number will be quite satisfactory as they are.

A settler should, in our opinion, have such an area as will not merely provide for his present requirements, but give him as time passes some opportunity of augmenting his income by the intelligent use of his land. A bare living is not a sufficient inducement to settle on the land, nor does it give much incentive for developing the land to the utmost.

III.—  
The factor of  
family  
labour.

Another factor to be weighed in determining areas is that the farm income always represents the labour of at least two persons. Often it represents the labour of a large family.

The hours of work also are longer than in any regulated industrial calling, and usually average 10 or 12 hours per day. And although labour may be lightened by the use of machinery such as tractors, milking machines, power separators, and the like, the work of a successful dairy farm must always entail long hours. Neither is there any break nor holidays; the work is continuous the whole year round. Indeed dairying has been facetiously described as the nearest known approach to perpetual motion.

On the other hand the compensations for the effort put into the building up of a successful farm are many—Natural life, monthly income, independence, cheaper living on account of using the products from the farm, and augmented assets in old age owing to the land increasing in value as years pass by, are the most obvious advantages that accrue.

IV.—  
A "forty-five  
cow  
standard"  
recom-  
mended.

For a new settlement such as this we are of the opinion that each settler should have sufficient land to permit him to have at least 30 milkers in profit throughout the year; that is, his selection should be capable of carrying about 45 head of grown cattle, together with young stock and necessary working horses, and should also have at least 50 acres of cultivable land for growing feed for the cows. This should give him a gross income from his dairy of about £360 per annum, which ordinarily would be added to by pigs, crops, &c.

The standard suggested is for selections well situated; areas would need to be still further increased for lands more remote from railway, or subject to any special disability.

V.—  
Areas  
required on  
new  
standard.

What area will be required to fulfil this new standard? The carrying capacity of land varies greatly. The best of forest land in this district may carry one beast to five acres throughout the year. Forest land capable of being used for dairying varies in capacity from this down to one beast to ten acres.

Areas would therefore range from 300 acres upwards according to quality, with an average area of, say, 500 acres. Scrub lands planted with artificial grasses are of better carrying capacity than forest country; moreover, such grasses retain their succulence longer.

We think, however, that 300 acres of the best dairying land on the settlement is sufficiently small.

VI.—  
Increased  
areas not  
needed in all  
cases.

We repeat that increased areas will not be needed in all cases. In many instances settlers are satisfied with the areas they hold, and many areas conform to the standard laid down by us; in fact, a few settlers have more land than they can improve and bring into production.

GRAZING AND AGRICULTURAL LANDS, UPPER  
BURNETT AND CALLIDE.



Ringbarked ridges between Waratah and Kolonga, Upper Burnett.



Hereford cattle grazing, parish of Grevillea, Callide Valley.



First-class cultivation land, Cania road, Upper Burnett.

“Rich belts of country exist which bear comparison with anything to be found in other parts of Queensland, and, if closer settlement could not succeed in the Upper Burnett and Callide, the outlook for increased primary production in Queensland would be dismal indeed.”—  
Page 15.

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In all cases, however, where settlers have less than the standard area they should be allowed to increase their holdings.

It may be objected that a "45-cow standard" does not give much scope to a man with a large family. Each son of the family, however, if of the age of 16 years, may acquire or select a similar area on giving proof that he is in a position to develop it. The land may then be worked in conjunction with the father's block, and if distant not more than five miles, residence by the son on the father's block will suffice for performance of the condition of personal residence.

VII.—  
The position  
of the family  
man.

Moreover, there is no obstacle in the way of the father acquiring by purchase additional land when he is in a position to work it, so long as he keeps within the general limit as to area laid down by the Land Acts.

As already stated not all the land in the settlement is suitable for agriculture or dairying; some of it is purely grazing country.

VIII.—  
Standard for  
grazing  
areas.

The area required to make a living from grazing in this district varies according as the land is fattening or breeding country.

The evidence establishes that a fair return from fattening country is about 30s. per beast per annum on the carrying capacity of the holding. In our opinion grazing areas in this district should have capacities ranging from 300 head to 1,000 head of cattle according to the character of the country, distance from railway, and other circumstances present in each case.

#### ADDITIONAL AREAS FOR SETTLERS.

The matter of adjusting areas at this stage will be a task of great difficulty. It is well to recognise that no matter how admirably the matter may be handled, no matter with what equity and justice the claims may be met, all the settlers are not likely to be satisfied. Human nature has its weaknesses; self interest is still a powerful trait of mankind. Thus most men are poor judges of their own cases; they look not for equity or justice but for acquiescence in, and approval of, their claims.

I.—  
Administra-  
tive difficul-  
ties in  
granting  
additional  
areas.

It must not be expected, therefore, that these adjustments can be effected without criticism from those whose applications for additional areas are such that they cannot reasonably be met. Disappointed hopes, when concessions are going around, are always a source of heart-burning and discontent. However, if the interests and prosperity of the whole of the settlement are truly served, that is all we can hope to accomplish.

Two main classes of cases will arise for consideration, selections which have vacant Crown lands either adjoining or in close proximity, and selections which have no available Crown lands in their neighbourhood.

II.—  
Two main  
classes for  
considera-  
tion.

The first group of cases may be adjusted by allotting to each selector a portion of the available Crown land as an additional area, or in the event of there being more than one applicant with equal claims, by holding a ballot to determine priority.

But in the case of two claimants for the same additional area it might so happen that one of them had fully developed his existing holding while the efforts of the other had been somewhat half-hearted. In such an event we think the person who had proved his greater capabilities as a selector should receive preference over the other applicants.

In the second group of cases, where no Crown land exists in the immediate neighbourhood, the selectors should be allowed to adjust their position by buying from or selling to one another. In the event of a selector selling his holding to his neighbour, he should be allowed to select a sufficient area of available land elsewhere in the scheme.

III.—  
Should  
additional  
areas be  
granted  
some  
distance  
away from  
original  
holdings?

Another question that arises is whether, in the event of there being no vacant Crown land near at hand, additional areas should be granted at some distance, say up to ten miles, from original holdings. The evidence shows that opinion amongst settlers is about equally divided on this question. Many would prefer such additional areas to none at all, while many think that additional areas, so situated, would be of little value to them.

The Board does not favour the proposal. We think that moves of this kind, dictated by expediency, should be barred. In our opinion such a form of patchwork settlement would give satisfaction to very few and ultimately would be against the best interests of the district.

IV.—  
Summary of  
recom-  
mendations  
as to areas.

Summarising the requirements of the position as to size of areas and as to granting additional areas we *recommend* :—

- (1) That the areas for new settlement in the Upper Burnett and Callide Valley be based on dairying rather than on agricultural pursuits.
- (2) That each settler be allowed to hold such an area as will permit him to milk at least 30 cows all the year round—that is, his selection should be capable of carrying at least 60 head of mixed dairy stock, with necessary working horses, and should also provide at least 50 acres of cultivable land.
- (3) That new selections remote from railway, or subject to other disabilities, be increased in area beyond this standard.
- (4) That selectors already established on areas that do not conform to above standard be allowed to increase their holdings—
  - (a) By the allotment to them of an additional area in the event of there being vacant Crown lands in the immediate neighbourhood; or
  - (b) By the purchase of a neighbouring selection.

NATURE'S WEALTH, CALLIDE VALLEY.



Natural grass, parish of Grevillea (third section).



Growth of natural grass, Callide Valley.



Extensive flats, parish of Grevillea (third section).  
The third section has not yet been made available for settlement.

"Judged on the basis laid down recently by the British Economic Mission, the Upper Burnett and Callide Valley Settlement Scheme may be regarded as a sound State investment. Indirectly, it will return interest and redemption manifold."—Page 10.

Face Page 24.]



- (5) That additional areas be not granted more than a few miles away from the original selection, and that generally selectors requiring an additional area, whose selections adjoin available Crown land, be regarded as having a better claim to such available land than selectors more remote.
- (6) That claims for additional areas of available Crown land be heard in open Court, and be determined judicially by the Land Commissioner, with a right of appeal to the Land Administration Board, whose decision would be final.
- (7) That when additional areas have been granted, or acquired, personal residence on one of the blocks should be regarded as sufficient—that is the additional area should be free from residential conditions.
- (8) That in order to facilitate adjustment of areas, selectors be allowed to sell their holdings to their neighbours. For this purpose the subdivision of selections and the sale of a portion to one neighbour, and a portion to another neighbour, to be allowed, and the Agricultural Bank to make advances to assist such dealings.
- (9) That *bona fide* selectors who sell their holdings to neighbours be eligible to select a new selection of adequate area elsewhere in the settlement.
- (10) That the area of grazing land which one person may acquire be regulated according as it is fattening or breeding country, and that these areas vary from a carrying capacity of 300 head to 1,000 head, according to the circumstances present in each case.

#### CAPITAL VALUES AND RENTS.

The capital values of dairying or farming blocks on the settlement range from 17s. 6d. per acre to £3 10s. per acre, and the rents payable on grazing lands from  $\frac{3}{4}$ d. to  $5\frac{1}{2}$ d. per acre. These figures include "loading" for the necessary roads and bridges constructed by the Crown.

I.—  
Range of  
capital  
values and  
rents.

At one time it was the practice of the Department to show "loading" separately, but for certain administrative reasons that practice was discontinued, and the value of the land and the amount of loading, although calculated separately, were eventually lumped together in one sum as the capital value.

II.—  
The method  
of adding  
loading for  
roads and  
bridges.

In the case of this settlement the loading on Perpetual Leases was arrived at on an acreage basis—that is each acre of land carried the same amount of loading, irrespective of the quality or productive capacity of the land. The consequence of this method was that the capital values of inferior lands were fixed at rates relatively higher, and out of proportion to the capital values fixed on the good lands.

However convenient this method may be, in practice it is unsound, and hence many capital values need to be reviewed.

III.—  
Conflicting  
views of  
selectors.

About two-thirds of the witnesses who came before us asked for a reduction in capital values, the remainder were satisfied with their present values. In fact many settlers expressed the view that the capital values of their selections were moderate, and that it would be unreasonable to request a reduction.

IV.—  
Rents are  
merely  $1\frac{1}{2}$   
per cent.  
of capital  
values.

It has already been pointed out earlier in this Report that, on the Perpetual Lease system, the rental payable is merely  $1\frac{1}{2}$  per cent. of the capital value. As the real value of money is about four times this percentage, capital values would indeed have to be high before the tenant was unduly burdened by rent. On present capital values the rents payable by tenants on average selections range from about £6 to £13 per annum, or from 2s. 6d. to 5s. per week. Such rents, providing the selections were reasonable living areas, would be quite moderate.

Crown tenants cannot expect to get their lands for nothing, because the Crown loses the grazing rents which were formerly collected from the lands, and has to pay interest and redemption on the cost of resumptions and on the cost of constructing roads and bridges, not to mention the new settlement railways.

V.—  
Recom-  
mendations  
as to rents.

While we think that the best of the lands are not unfairly rented, we consider it desirable that reductions be made on the more inferior dairying lands and on the grazing lands.

We therefore recommend that the Board be authorised to review all capital values and rents so that they may be fixed in correct relation to each other, and in all cases be based on the quality and productive capacity of the land.

### FREEHOLD TENURE *v.* PERPETUAL LEASE.

I.—  
Difference  
between  
annual rents  
on Agricul-  
tural Farms  
and  
Perpetual  
Leases.

Allied to capital values and rents is the question of tenure, because if the Government decides to allow conversion of the tenure of the lands in this settlement from Perpetual Lease to Agricultural Farm Selection, the rents on the new basis will be different. As already stated, rents on the Perpetual Lease system are  $1\frac{1}{2}$  per cent. of the capital value. On the other hand, the purchasing price of Agricultural Farms is paid by the Crown tenant, in annual instalments as rent, over a period of thirty years; during the first twenty years the annual rent is one-fortieth, or  $2\frac{1}{2}$  per cent. of the total purchasing price, and during the remaining ten years it is one-twentieth, or 5 per cent. of the total purchasing price. These payments complete the purchase of the land, and entitle the selector to a Deed of Grant.

II.—  
Merit of  
Freehold *v.*  
Perpetual  
Lease is a  
political  
question.

The merit of Freehold *v.* Perpetual Lease is a political question which it is not our function to discuss, for it is a well recognised constitutional maxim that permanent officers of the Crown should not engage in political controversies, nor publicly comment on any matter affecting their Departments, which is a current political issue in the country. We intend to observe that maxim.

The late Government, which founded this settlement, adopted the perpetual lease tenure as a matter of policy. If that system is continued it is necessary, as explained above, that the lands be revalued. Should, however, the present Government decide to allow conversion to freehold it will be still necessary to review and reduce the value of the lands so that the annual rents, payable as instalments of purchasing price, may be fixed at a fair economic amount in each case.

Before leaving this subject it only remains for us to record the fact that the majority of Crown tenants on this settlement who expressed their views on the question prefer that their selections be held under a freeholding tenure rather than under the perpetual lease system.

III.—  
Settlers  
prefer  
Agricultural  
Farm or  
freeholding  
tenure.

### WATER FACILITIES.

When this country was used for grazing, and was divided into large paddocks for that purpose, the natural water supply, augmented by a few wells, was sufficient for all purposes. When it was divided into small holdings, however, the natural water supplies were confined to comparatively a few blocks, and it was necessary to obtain artificial supplies for the remainder.

I.—  
Need for  
artificial  
supplies.

To aid settlers in locating underground supplies of water and in sinking wells and sub-artesian bores, Government assistance was offered. The officers of the Irrigation Commission advised against the putting down of earth tanks in this settlement, on the ground that bores gave a better and cleaner supply of water, and because of the non-holding nature of the ground in places. Wells and sub-artesian bores were therefore concentrated on, and little has been done in the way of putting down tanks.

II.—  
Government  
assistance  
granted.

Arrangements were made by the Minister for Lands, through the agency of the Irrigation Commission, to sink bores and supply equipment, on the application of settlers, subject to the following terms and conditions :—

- (1) The settler was to take over the water facility at its actual cost, provided that no settler would be charged more than £300—that is, no matter what the bore might cost, the settler's maximum liability would be £300; any amount in excess of that would be a loss to the Crown.
- (2) Windmills or engines, and troughing were to be supplied to the settler at actual cost.
- (3) Interest and redemption payments were to be made by the settler, in the case of the bore over a period of 20 years, the redemption payments to start after the third year, and in the case of the equipment over a period of 10 years, redemption payments to start after the second year. Interest and redemption payments would amount to £8 16s. 0½d. per cent. for the bore and £15 6s. 5d. per cent. for the equipment.



III.—  
Method  
adopted.

Much of the country presented no difficulty in the matter of subterranean water supplies, but some of it, particularly the Mulgeldie scrub area, was notoriously difficult. The method adopted was for the Government Water Finder to choose a site on which the officers of the Irrigation Commission sank the bore. The work was entirely controlled by the Irrigation Commission, and the full cost thereof was charged to the Lands Department, which, in turn, took a mortgage over the selection providing for repayments as outlined above.

IV.—  
Quality of  
work done.

We are satisfied, from the evidence, that the quality of the material and workmanship in these bores and equipments is quite satisfactory. Only a few specific complaints were made to us, and these are being departmentally considered.

It was also complained by several settlers that certain items of the equipment were of a better standard, and consequently cost more than the price at which suitable articles of lesser quality could be obtained. We have no doubt that this is correct, but when ten years' repayment terms are allowed the equipment has to be of high quality so that it will stand up to constant use over that period. No settler could obtain the equipment supplied him by the Irrigation Commission at a less cost than he is charged.

V.—  
Weakness  
of method.

This method of assisting the settler to provide a water facility may seem admirable, yet it has a great and serious weakness.

Many Crown tenants are willing to make contractual obligations with the Crown, intending at the first opportunity to try and obtain relief from them. They know that the Crown is interested in their welfare and is not likely to be unduly harsh if default is made in payments. They know that the Government is elected by the people, and they rely on the influence that the power of a vote can sometimes secure. Nothing could be more dangerous to the success of closer settlement schemes, under democratic Government, than this tendency which many small settlers have of entering lightly into contractual obligations with the Crown, and then at the first opportunity trying to escape their individual obligations by passing them on to the community. This is a modern tendency, and it must be dealt with departmentally with a strong hand. Too much "spoon feeding" will never make a successful settler, rather it produces a discontented, grumbling, and unreasonable tenant, whom nothing will satisfy, and all administration displeases.

VI.—  
Water  
charges  
over-  
capitalise  
some blocks.

And yet, no matter what motive may have induced Crown tenants voluntarily to undertake these obligations, we are forced to the conclusion that some of the water charges over-capitalise some of the blocks. If obligations are to be enforced it is necessary that they be such as can be economically borne by the tenant. We cannot see how an average tenant

## THE TOWNSHIP OF BILOELA, CALLIDE VALLEY.



The Public Hall at which the Board conducted its investigation.



The main street, Biloele.



The main street, Biloele.

“The progress that has already been made, and the towns that have been established throughout the area, speak well for the energy and enterprise of the people, and, in the course of time, there is no reason to doubt that this great new district will compare favourably in prosperity with the older closer settled districts of the State.”—Page 15.

*Face Page 28.]*

can afford to pay, on a small block, £300 for a bore and £200 for equipment, on the terms charged. The interest and redemption payments would amount to £26 8s. for the bore and £30 12s. for the equipment, or a total water charge of £57 per annum. In addition to this the settler would have to pay rent, rates, improve the land, and probably pay interest and redemption on an Agricultural Bank loan. It cannot reasonably or economically be done.

Instead of a hypothetical case we will give some actual examples.

Portion 103, parish of Selene, is a scrub block comprising 149 acres. Its capital value is £1 7s. 6d. per acre. The annual rent, on the basis of  $1\frac{1}{2}$  per cent. of the capital value, amounts to £3 1s. 7d., or approximately 5d. per acre. The cost of the bore to the selector is £300, and of the equipment £192, making a total of £492, which equals a capital cost over the whole block of £3 6s. per acre. His interest and redemption charges now payable amount to £55 16s. 5d., or 7s. 6d. per acre per annum.

Portion 19, parish of Tellebang, is also a scrub block. It comprises 161 acres. The capital value is £2 10s. per acre. The annual rent amounts to £6 0s. 11d., or 9d. per acre. The cost of the bore to the selector is £300, and of the equipment £357, making a total of £657, or £4 1s. 7d. per acre over the whole portion. The interest and redemption charges now payable amount to £81 2s., or 10s. 1d. per acre per annum.

Can there be any doubt that some blocks have been over-capitalised?

In regard to earth tanks we are of the opinion that they have not been sufficiently tested. Many selections have good catchments, and the Board is satisfied that the subsoil in a large number of the blocks will hold water well.

VII.—  
Illustrations  
of over-  
capitalisa-  
tion.

The present price, locally, for the construction of earth tanks is 2s. per cubic yard. If a number of tanks were to be put down it is probable that tenders could be obtained at 1s. per yard. On this basis the cost of clearing the site, constructing a 2,000-yard tank, and necessary silt tank and drains, would be about £150. This would provide a satisfactory and cheap water supply for a selection. In the provision of future water facilities we think that more attention should be given to the possibilities of earth tanks.

VIII.—  
The  
possibilities  
of earth  
tanks not  
sufficiently  
tested.

A schedule giving in detail particulars of water facilities provided for settlers is contained in Appendix E. The depth of wells ranges from 22 feet to 70 feet, and of bores from 36 feet to 666 feet. The cost of the wells and bores varies from £26 to £498. The cost of the equipment varies from £35 to £357. The total amounts which the selectors are required to take over on mortgage in respect of water facilities, including equipment, vary from £137 to £657.

IX.—  
Particulars  
of water  
facilities.



X.—

Total Crown  
expenditure  
to date on  
water  
facilities and  
equipments.

The total Crown expenditure to 31st March, 1929, on water facilities and equipments, including plant, was £73,760 4s. 6d., made up as follows :—

	£	s.	d.	£	s.	d.
Construction of water facilities .. .. .	..	..	..	53,806	6	6
Stores .. .. .	..	..	..	3,524	3	3
Plant .. .. .	..	..	..	9,419	2	4
Administration—						
Salary and expenses .. .. .	5,140	1	4			
Fares and freight .. .. .	177	7	9			
Miscellaneous (including wet weather pay) ..	3,597	2	2			
Car .. .. .	498	14	1			
Holiday pay .. .. .	946	6	2			
	10,359	11	6			
By transfer to individual water facilities (7½ per cent.) .. .. .	3,348	19	1	7,010	12	5
Total .. .. .				£73,760	4	6

XI.—

Amount  
covered by  
settlers'  
mortgages.

Mortgages have been executed by selectors to date covering 235 bores or wells, and amounting to £45,433 8s. 3d. Further mortgages are in course of execution. Particulars are as follows :—

	£	s.	d.
Cost of bores or wells .. .. .	22,643	16	4
Less amount borne by Crown .. .. .	1,568	6	9
	21,075	9	7
Cost of equipments .. .. .	24,357	18	8
Total .. .. .	£45,433	8	3

235 bores or wells cost the Crown £22,643 16s. 4d. (average £96 7s. 2d.).

235 bores or wells cost selectors £21,075 9s. 7d. (average £89 13s. 7d.).

148 equipments cost selectors £24,357 18s. 8d. (average £164 11s. 7d.).

XII.—

Loss  
incurred by  
Crown.

The amount of loss incurred by the Crown to date in the provision of water facilities totals £14,519 9s. 6d., or 19·5 per cent. of the total expenditure. This is made up as follows :—

	£	s.	d.
Unsuccessful bores .. .. .	5,940	10	4
Expenditure in excess of amount charged to selectors .. ..	1,568	6	9
Difference between actual cost of supervision and amount charged to selectors .. .. .	7,010	12	5
Total .. .. .	£14,519	9	6

A list of the unsuccessful bores, with reason for failure in each case, is given in Appendix F.

XIII.—

Overhead  
costs are too  
high.

It will be noticed, that the overhead costs in connection with these water facilities, including wet weather and holiday pay, are high, amounting to approximately 20 per cent. of the total outlay. This, however, is not all charged to the settler. He pays overhead costs at the rate of 7½ per cent. on the cost of construction; the balance is a loss to the Crown. That loss to date has amounted to £7,010 12s. 5d., which must be regarded as unsatisfactory.

There are a number of reasons for this high overhead cost, but the chief one only need be referred to. At the outset of this scheme the Government decided that the Irrigation Commission, acting as agent for the Lands Department, should put down these bores. This decision was merely in conformity with the general Government policy that there should be no duplication or overlapping of departmental activities or of staffs. Ordinarily, it is a perfectly sound principle. But in this instance the Lands Department already had Public Estate Improvement Staff and gangs operating in the area and all necessary administration machinery in connection therewith. The establishment by the Irrigation Commission of another working staff, separately and independently controlled, meant further administrative machinery and additional overhead costs.

If the Irrigation Commission's staff operating in the area were temporarily transferred to the control of the Land Administration Board, while engaged in this special work for which the Board must pay, the Board would be able to arrange complete co-ordination between the two sections, utilise all employees to the best advantage, dispense with duplication of staffs, and generally reduce overhead costs.

This matter is again referred to in a later section of this Report dealing with Departmental Administration, and as it involves a question of Public Service organisation we have also dealt with it, in greater detail, in a separate memorandum addressed to the Public Service Commissioner.

In regard to water facilities (including equipment) we make the following recommendations :—

XIV.—  
Recom-  
mendations  
in regard to  
water  
facilities.

- (1) That the Land Administration Board, which has to meet all the costs in connection with water facilities, be given control of this work. For this purpose it is suggested that the water facility gangs and staff now operating in the Upper Burnett and Callide be placed, while engaged on such work, under the direction and control of the Board. This will considerably reduce overhead expenses.
- (2) That, notwithstanding the fact that mortgages have been executed, the Board be authorised to write down water costs to such amounts as will, in the judgment of the Board, be a fair capitalisation for each block. This will probably mean that a further sum of about £2,000 will be written off.
- (3) That when water costs have been adjusted in this manner, the payment of interest and redemption by the settler be strictly enforced.
- (4) That to provide cheap and satisfactory facilities for selectors in future, more attention be given to the possibilities of earth tanks.

ROADS AND BRIDGES.

I.—  
Early  
settlement  
and roads.

The lands of the Upper Burnett were first used for grazing more than seventy years ago when the territory formed part of the Colony of New South Wales. They have been in continuous occupation ever since. As time went on, roads were constructed and creek crossings were made to the extent that was necessary for the effective use of the country for cattle grazing. Then, at last, came this settlement scheme which altered the whole aspect of road communication.

II.—  
Need for  
additional  
roads and  
bridges.

With the advent of closer settlement entirely new roads had to be constructed to serve the new subdivisions and enable the settlers to get their products to the railway. New bridges, causeways, and crossings were also needed. Whereas, formerly, it was of little economic importance if a cattle grazier were isolated for a few weeks owing to the state of the roads and crossings, it is necessary under the altered settlement conditions that settlers should have daily, or almost daily, communication with the railway.

III.—  
General road  
policy and  
expenditure.

The work of constructing the necessary roads and bridges was undertaken by the Public Estate Improvement Section of the Lands Department. The roads are intended to give reasonable pioneering access only—that is, they are cleared, where necessary formed with a grader, and rolled, but, except in a few exceptional places, they are not gravelled. The bridges, however, are first-class structures.

The cost of this work is, in the first instance, borne entirely by the Crown, and is defrayed from a parliamentary vote. Over a long period of years repayments are made by the selectors through the “loading” which is added to the capital value of their lands. When the roads and bridges have been constructed they are handed over to the Local Authorities, and the Crown accepts no further responsibility in respect of them.

Since the inception of the scheme five bridges and causeways have been built, and 634 miles of road constructed. Expenditure has been as follows :—

							Roads.		Bridges.		Total.	
							£	s. d.	£	s. d.	£	s. d.
1923	..	..	..	..	..	..	6,237	10 1	..	..	6,237	10 1
1924	..	..	..	..	..	..	11,840	4 1	..	..	11,840	4 1
1925	..	..	..	..	..	..	12,453	18 1	696	19 5	13,150	17 6
1926	..	..	..	..	..	..	10,381	12 11	824	9 10	11,206	2 9
1927	..	..	..	..	..	..	10,121	5 0	1,411	12 2	11,532	17 2
1928	..	..	..	..	..	..	16,856	7 7	2,381	14 1	19,238	1 8
To 31st March, 1929..							3,700	2 11	1,617	16 5	5,317	19 4
							£71,591	0 8	£6,932	11 11	£78,523	12 7

Bridge figures include only large bridges. All culverts and crossings are charged to “Roads.”

IV.—  
Plant and  
gangs  
employed  
and general  
standard  
of work.

The road work was commenced without adequate machinery, and much of the early construction was of an inferior standard. This short-coming, however, has since been remedied, and modern road-making plants are now in use.



## NEW BRIDGES ON THE SETTLEMENT.



Bridge over Three Moon Creek, near Monto, Upper Burnett.



Kroombit Creek bridge under construction, Callide Valley.



Mack's Crossing, Monal Creek, near Monto, Upper Burnett.

“With the advent of closer settlement entirely new roads had to be constructed to serve the new subdivisions and enable the settlers to get their products to the railway. New bridges, causeways, and crossings were also needed. Whereas, formally, it was of little economic importance if a cattle grazier were isolated for a few weeks owing to the state of the roads and crossings, it is necessary under the altered settlement conditions that settlers should have daily, or almost daily, communication with the railway.”—Page 32.

*Face Page 32.]*

The machinery and plant on hand, exclusive of the ordinary small tools and equipment, comprise the following:—Two Wehr graders, two 5-ton rollers, three utility trucks, three 1-ton trucks, and two pile-driving units, making twelve oil-driven engines in all, sixteen horses, six drays, and necessary road ploughs and scoops. There is also the necessary equipment for bridge building.

All works are carried out under the direction of the Engineer, who is assisted by three experienced Field Assistants with headquarters at Mulgeldie and Biloela. There are eight road gangs, four bridge gangs, and two road machinery gangs, making fourteen gangs in all, comprising some eighty men. Each gang is controlled by a competent ganger.

In travelling throughout the settlement we travelled over 1,000 miles of roads. We therefore traversed most of the road systems in use. Our inspections commenced the week following heavy rains of about 7 inches. The roads were therefore seen at their worst. On the whole they were in reasonably good condition for a pioneering settlement, but in some places they were very boggy, and a few instances were quoted to us of settlers losing their cream for some days, as the condition of the roads did not permit their getting it to the railway.

V.—  
What  
Board's  
inspections  
showed.

The Board forthwith recommended, notwithstanding that the roads in question had been handed over to the Local Authorities, that the bad sections be immediately repaired at Government expense. The then Government approved of this recommendation; the work was commenced at once and is still proceeding.

VI.—  
Repair work  
undertaken  
forthwith.

The Upper Burnett Area is mostly in the Shire of Eidsvold; a small portion of it is in the Mount Perry Shire; the Callide Area is in the Shire of Banana. These three Shire Councils, with headquarters outside the settlement, at Eidsvold, Mount Perry, and Banana respectively, must undertake the responsibility of maintaining all the roads on the settlement when they have been completed. Of the three Shires, Eidsvold contains much longer mileage of new roads, and will, consequently, have to carry the heaviest burden, but, on the other hand, will have the largest revenue.

VII.—  
Local  
authorities  
interested.

After the adjustments we are recommending with regard to the settlement have been carried out, viz.:—

- (a) Repairs to bad sections of roads;
- (b) Increased areas to settlers;
- (c) Review of capital values and rents;
- (d) Review of water facility charges in special cases;

we think that the Shire Councils will have no difficulty in collecting from the settlers an equitable amount of rates that should be sufficient, without Government aid, to maintain the roads.



## VIII.—

Suggested  
change of  
Shire  
head-  
quarters.

Eidsvold is, we think, not the most satisfactory centre for controlling the Local Government affairs of the larger portion of this new district. In its mining days Eidsvold was a town of considerable importance, but with the decline of mining the town declined, though it continued to exist as the centre of a pastoral or grazing district.

The land around Eidsvold is inferior to the land further north comprised in the Upper Burnett, and consequently is not capable of much development.

The town of Monto, on the other hand, is in the centre of the new settlement, surrounded by rich land with great potential productivity. It must undoubtedly be the chief town of the district. We think, therefore, that consideration should be given to shifting the Shire Headquarters to the heart of the new settlement at Monto. Indeed if the Government would consider the abolition of the Eidsvold Shire and the creation of a new Shire of Monto, embracing all the lands in the settlement, such action would materially advance the welfare of the district.

## IX.—

Mount  
Lookerbie-  
Monto road  
*versus*  
railway.

As explained elsewhere the railway from Rockhampton is now open to the town of Thangool, which is about sixty miles north of Monto by road. The rails have been laid beyond this point, and earth works constructed to Mount Lookerbie, seven miles beyond Thangool, but all work has been stopped for some time, and this section is not yet available for traffic. Before work is proceeded with beyond Mount Lookerbie it is recommended that the merits of a good road *versus* a railway be carefully considered.

A good road would cost less than half the amount needed for a railway, its cost of maintenance would also be less than half, while the users of the road, unlike the railway customers, would provide the whole of their own running costs. The extension of the railway would not materially affect the land settlement position, nor would it add to railway revenue, as all the production from the intervening lands would be sent to the nearest railway station in any event.

## X.—

General  
recom-  
mendations  
*re* roads.

On the subject of roads and bridges we *recommend* as follows :—

- (1) That sections of the Public Estate Improvement constructed roads, that have proved untrafficable in wet weather, be re-formed and repaired by the Public Estate Improvement Section of the Department without contribution from the Local Authority, but the Local Authority to be responsible for all future maintenance.
- (2) That when allotments in new townships are being offered for sale by the Government, the street fronting such allotments be cleared and formed by the Public Estate Improvement Section.
- (3) That the annual Parliamentary Vote for all Burnett works, including roads and bridges, water facilities, and pear destruction, be increased by £10,000, making £50,000 in all.



GRADED ROADS OVER RIDGY AND MOUNTAINOUS  
COUNTRY.



Different views of roads between Monto and Kalpowar, Upper Burnett.

This will enable the work to be speeded up, will release the Government from all liabilities at an earlier date, and will prove more economical in the end.

- (4) That, on economic grounds, consideration be given to the construction of a good road or a main road from Monto to Mount Lookerbie in preference to a railway.
- (5) That consideration be given to making Monto the headquarters of Local Government for the Upper Burnett.

### OPERATIONS OF THE AGRICULTURAL BANK.

The State Agricultural Bank has furnished us with the following statistics illustrative of the Bank's operations in the Upper Burnett and Callide :—

I.—  
Applications  
for advances  
approved  
and  
refused.

	No.	Amount.
Total applications for advances received since inception of scheme, <i>i.e.</i> , from 1st January, 1924, to 31st March, 1929.. ..	874	£ 176,523
Applications approved (including fifty-two applications for £9,453 under Discharged Soldiers' Settlement Acts) .. ..	689	88,131
Applications refused .. ..	171	42,364
Applications cancelled or withdrawn .. ..	7	1,023
Applications in abeyance pending receipt of inspector's reports, &c. ..	7	1,780

An advance of £9,000 has also been granted to the Port Curtis Co-operative Dairy Association, Ltd., for the erection and equipment of a butter factory at Monto.

We found that a number of settlers were under the impression that the Agricultural Bank had a monopoly of this business, that the law would not allow settlers to obtain advances from other financial institutions on the security of a mortgage over their selections. It was obvious that some of them were chafing under this supposed restriction. We pointed out that their interpretation of the law was incorrect, that the Minister has a discretion in allowing mortgages to institutions other than the Agricultural Bank, and further, we gave a definite assurance that, if *bona fide* applications were made for permission to obtain money from any recognised financial institution on mortgage, such permission would be granted.

II.—  
Other  
financial  
institutions  
may  
compete  
with  
Agricultural  
Bank.

### IMMIGRATION SETTLEMENT.

The Upper Burnett and Callide Valley has already received attention as a possible field for the settlement of migrants.

I.—  
Previous  
reports on  
Immigration  
Settlement.

The present Minister for Trade and Customs, the Hon. H. S. Gullett, when he occupied the position of Commonwealth Superintendent of Immigration in Australia, was sent, in 1921, by the then Commonwealth Prime Minister, the Right Hon. W. M. Hughes, P.C., to report on the suitability of the area for that purpose. The land was then being used for grazing only.



Mr. Gullett traversed the area from north to south, and spent a few days making general inquiries and investigations in the district. On his return to Melbourne he submitted to the Commonwealth Parliament a report on his investigations, and set out his conclusions, *inter alia*, as follows :—

(1) In its soil, rainfall, elevation, and geographical proximity to the coast, the area is ideal for subdivision into small agricultural and grazing farms. Only railway communication and settlers are necessary to make it one of the most profitable rural localities in Australia.

(2) Only the great rural wealth of farming lands possessed by Queensland, political controversy as to the routes of the proposed railways, and the lack of money have withheld the area from closer settlement.

(3) An area with the same natural conditions, equal producing capacity, and located in New South Wales or Victoria, would, if served by railways but in its present undeveloped state, have an average value of at least £8 or £10 an acre, including its grazing portions.

(4) The area—by its richness, its magnitude, and the simple methods by which it could be pioneered—is ideal for settlement in part by carefully selected immigrants.

(5) As to climate, he expressed the opinion that “The Upper Burnett and Callide Valley country is, thanks to its elevation, as congenial to white people as any country in the Commonwealth.”

II.—  
Land  
Administra-  
tion Board is  
not the  
Authority  
in charge of  
migrant  
settlement.

The Land Administration Board is not the authority for framing settlement schemes for migrants. The Commonwealth Development and Migration Commission acts in association with a “State Consultation Committee on Developmental Proposals.” This Committee is composed of representatives of several Public Departments, including the Lands Department, and is under the chairmanship of the Minister for Agriculture, and with a Deputy Chairman, the Under Secretary for Works. It is charged with the function of formulating developmental, settlement, and migration proposals for investigation by the Commonwealth Commission. In the circumstances we merely express our opinion that, if migrant land settlement is desired in Queensland, the lands in the Upper Burnett and Callide Valley will be found as suitable for the purpose as any other available land in Queensland.

In framing any scheme, however, it would be necessary to see that the rights of the Australian settlers already established in the district to obtain additional land where it is needed are fully protected.

#### PRICKLY-PEAR LAND.

I.—  
Some of  
Callide lands  
are pear  
infested.

The Upper Burnett Lands are almost entirely free of pear, but the northern and western boundaries of the Callide Valley Lands abut on pear-infested country, and parts of this section are infested. To date the Department has spent £10,501 in destroying pear by poisoning on this area, so as to prevent its encroachment on to the valuable closer settlement lands.

As the administration of the Callide Valley is under a special Act, these lands are excluded from the jurisdiction of the Prickly-pear Land Commission.



Notwithstanding the provisions of "*The Upper Burnett and Callide Land Act of 1923*" we recommend that all pear-infested land in the Callide Valley be dealt with by the Prickly-pear Land Commission under the Prickly-pear Land Acts. That is, we recommend that these lands be made available for settlement under the same terms and conditions as if they were ordinary infested Crown lands, and did not form part of a special settlement scheme.

II.—  
All infested lands should be dealt with under the Prickly-pear Land Acts.

## DEPARTMENTAL ORGANISATION.

Since the inception of this settlement scheme the Upper Burnett has been included in the Gayndah Land Agent's District, under the jurisdiction of the Land Commissioner stationed at Maryborough, and the Callide Valley in the Rockhampton Land Agent's District, under the jurisdiction of the Land Commissioner at Rockhampton. As explained elsewhere, in order that the Board might keep in close touch with the administration of the area, a Field Superintendent was appointed in April, 1928, and was stationed at Eidsvold. This town was chosen because of the Public Office and private house accommodation there available.

I.—  
Administration from outside area is uneconomical and unwise.

Our inquiry has forced us to the conclusion that further efforts to administer this area from a place outside, or to postpone the formation of a separate Land Agent's District, would be both uneconomical and unwise.

To provide efficient administration we propose the following:—

II.—  
Suggested rearrangements.

(1) All the land in the Upper Burnett and Callide Valley to be gazetted a separate Land Agent's District under the name "Monto Land Agent's District."

(2) The Monto District to be in charge of a Land Commissioner, with a Land Agent stationed at Monto. The Land Commissioner to have general supervision over all administrative work on the settlement.

A Lands Office will be needed at Monto. For this purpose part of the large public offices at Eidsvold, which are only partly used, could be pulled down and re-erected on the new site.

(3) The Engineer in charge of road and bridge construction to be stationed at Monto, so that he may exercise a close supervision over all work, and expedite its completion.

(4) The work of the Public Estate Improvement Section and of Water Facilities to be co-ordinated throughout by the Board taking over the Water Facility organisation, and amalgamating it with the Public Estate Improvement organisation. At present these two organisations are entirely independent of one another.

III.—  
Detailed recommendations made direct to Public Service Commissioner.

In the opinion of the Board this rearrangement would produce greater efficiency in Departmental work, with corresponding public satisfaction. Not only would it be more in accord with business principles but it would actually be more economical than the present arrangement.

As Departmental reorganisations of this nature are made by the Government on the recommendation of the Public Service Commissioner, Mr. J. D. Story, I.S.O., we have addressed to the Commissioner a separate memorandum setting out details of the present and proposed staffs, and also illustrating the economies that may be effected as well as the greater efficiency that will accrue. Such a memorandum, dealing as it does with the position of individual officers and employees, is not suitable for inclusion in this public Report.

## IV.—

The question of accommodation for officers.

As Monto and Biloela are new townships, the question of accommodation for Public Officers stationed there will arise. The erection of the necessary Public Offices will be a matter for the Works Department. As already stated, consideration might well be given to removing part of the large unused public building at Eidsvoll, and re-erecting it at Monto.

The matter of private housing accommodation is somewhat difficult. If the late Government's policy of not providing houses for its Lands Officials in country districts is adhered to by the present Government in the case of this new settlement, where no available housing accommodation at present exists, officers may be accommodated in one of four ways:—

- (a) Live at one of the Department's construction camps;
- (b) Live at one of the hotels or boarding-houses;
- (c) Acquire some land and build for themselves;
- (d) Arrange with some business man in the town to erect a dwelling and lease it.

In a growing township with an assured future (c) abovementioned probably would be the most satisfactory course to follow. All the land sold to date, however, has been made available under Perpetual Lease tenure, and Lands Officials are precluded from acquiring any such land in the districts where they are working. This restriction would need to be abrogated in so far as one town residential allotment is concerned.

## ACKNOWLEDGMENTS.

## I.—

Acknowledgment for assistance.

Mr. A. Hollingworth, Clerk in Charge of the Land Settlement Inquiry Section, acted as Secretary to the Board for the purposes of this Investigation. Mr. F. Williamson (*Hansard* staff) acted as Official Reporter.

It is due to these Officers that we record our appreciation of the ability and industry with which they discharged their duties.

W. L. PAYNE, Chairman,	} Members of the Land Administration Board.
A. G. MELVILLE,	
F. D. POWER,	

## Appendix A.

[Extract from "London Times" of 14th September, 1928.]

# IMPERIAL AND FOREIGN NEWS—SETTLEMENT IN AUSTRALIA.

(From our Perth Correspondent.)

It is more than a year since Mr. M. F. Troy, after his appointment as Minister of Lands and Group Settlements, toured the group settlement areas of Western Australia and acquainted settlers with the policy of his Government. An article, published immediately after in "The Times," outlined his difficulties and the prospects of the group settlement experiment at that date. It was said that there seemed little likelihood that the scheme would prove a financial success within a measurable period, but it was suggested that it might be the less tangible results of the most ambitious of all Australia's settlement schemes that would justify it in the long run.

Since that date a new executive Board to control the scheme under the Minister has been appointed; much bad land, hastily selected at the scheme's initiation, has been abandoned; and the number of holdings has been correspondingly reduced. Last year Mr. Troy made his announcement of policy to approximately 2,300 settlers: this year he has made another important statement to the bare 1,700 remaining. In the interval rather more than 600 settlers have given up their holdings. The reclassification of holdings was undertaken with the object of giving every settler who remained under the scheme a good opportunity of becoming a self-supporting and independent dairy farmer. This reclassification was completed several months ago, but the number of settlers who are self-supporting or independent seems, unhappily, to be as small as ever. The taxpayers in Western Australia strongly wish to see expenditure on group settlements very much curtailed, and Mr. Troy's new announcement of policy reflects this desire.

## COST OF SCHEMES.

Exact figures are not at the moment available, but it is known that the total expenditure up till now upon group settlement in Western Australia (including roads and drainage) is about £7,500,000. Seventeen hundred settlers remain, none of whom is yet wholly independent of the taxpayers' help. The average amount to be spent on each of the remaining holdings must therefore probably exceed £4,000. The unfortunate Peel Estate—an area close to Perth which has proved quite unfit for settlement—has cost approximately £2,250,000, and there are only 180 settlers left on it; so it is unfair to average the expenditure over all areas. None the less, there are holdings in other areas, which have cost between £5,000 and £6,000, which are not yet supporting their settlers. Western Australia, with a total population of less than 400,000 and a total taxpaying population of less than half that number, cannot continue to carry so heavy a load for results so scanty.

These facts prompted the Minister (advised by the Group Settlement Board) to announce his new policy recently to a meeting of settlers. The Cabinet will decide on the amount of capitalisation upon which each settler is to pay interest and ultimately principal; and settlers will receive no further advances for routine

farming operations as soon as they reach the standard of productivity represented by the possession of ten cows. It has been shown that the average amount expended in developing each holding under the scheme exceeds £4,000. So heavy an expenditure is the direct result of the policy of paying settlers for the development of their own holdings, as if they were labourers on a basis of weekly hire. Some such scheme was inevitable, inasmuch as it was necessary to give settlers some means of support until their holdings should become reasonably productive; but in practice the system has proved both pernicious and disastrous. Settlers have failed to realise that the properties they were farming were ultimately to become their own, and have been obsessed by consideration of the amount of "wages" that could be earned week by week and month by month. The system produced a state of mind which regarded payment for farming operations accomplished as more important than the development of holdings which should have been looked upon as personal property.

## A HEAVY LOSS.

But no holding under the scheme can be expected to return, even in the hands of a capable dairy farmer with his heart in the job, interest upon a capitalisation of £4,000. The Cabinet will probably write off approximately three-quarters of the total expenditure on group settlement. A loss of between £4,500,000 and £5,000,000 is a very grave matter to the taxpayers of a small community, but it might be faced with relative equanimity if the 1,700 remaining settlers were finally established. They are not yet finally established, and it is only too likely that a number of them will abandon their holdings, as 5,000 of their predecessors have done, when they learn the exact figure upon which they have to pay interest. It will be very difficult to find men to put in their place, as it would be futile to put inexperienced men upon developed holdings, and almost impossible to get experienced men to take up holdings which at best can show only a bare margin of subsistence when interest has been paid on a capitalisation which will still be unduly high in comparison with market values.

Assistance to settlers is to cease when they have ten cows, and thereafter only such developments will be subsidised as are likely to result in permanent improvements of the holdings. Money is advanced on these conditions to new settlers by the Agricultural Bank of Western Australia, and the original Group Settlement Act provided that group settlers should be transferred to the control of the Agricultural Bank when they had reached an unspecified stage of productivity. It is now intended to keep "ten cow" settlers under the Group Settlement Board on Agricultural Bank conditions. The proposal is an improvement on the original, for the Group Settlement Board has ample dossiers about both settlers and holdings.

The Ministry will be open to serious criticism if costs are permitted to mount again after this readjustment. For seven and a-half years the holdings have been continuously developed in such matters as clearing, fencing, and draining, and there should not now be many more improvements of that kind to be done on a large scale.



## Appendix B.

RETURN OF OPERATIONS AT THE MUNDUBBERA BUTTER FACTORY (THE MARYBOROUGH CO-OPERATIVE DAIRY ASSOCIATION LIMITED) FOR THE YEAR 1928.

Month.	Butter Manufactured.	Amount paid Suppliers.	Price per lb.	Number of Suppliers.
	Lb.	£ s. d.	s. d.	
January .. .. .	318,810	16,966 9 9	1 1	571
February .. .. .	275,322	15,379 10 2	1 2	598
March .. .. .	272,102	16,835 5 3	1 3	582
April .. .. .	175,310	10,068 1 10	1 2	563
May .. .. .	129,928	8,539 11 3	1 4	537
June .. .. .	88,062	5,883 15 11	1 4	516
July .. .. .	90,710	6,731 19 5	1 6	498
August .. .. .	105,970	7,965 6 10	1 6	524
September .. .. .	111,462	8,291 0 8	1 6	542
October .. .. .	122,491	8,573 17 5	1 5	553
November .. .. .	178,870	12,548 17 2	1 5	600
December .. .. .	240,536	16,919 8 7	1 5	609
Total .. .. .	2,109,573	134,703 4 3	..	..
Monthly averages .. .. .	175,797½	11,225 5 4½	..	557·75

## Appendix C.

## ALPHABETICAL LIST OF WITNESSES.

Name of Witness.	Approximate Area Interested in.	Place at which Evidence Given.	Page of Evidence.
	Acre.		
Anger, Charles Augustus .. .. .	6,000	Monto .. ..	272
Anskewitz, Heinrich .. .. .	250	Abercorn .. ..	144
Anskewitz, Waldemar Adolf .. .. .	352	ditto .. ..	143
Arneil, James .. .. .	1,190	Goovigen .. ..	651
Ashtou, Percy .. .. .	343	Mulgeldie .. ..	214
Avard, James Justin .. .. .	520	Eidsvold .. ..	78
Avis, Joseph Lawrence .. .. .	348	Mulgeldie .. ..	194
Bailey, Aubrey Frank Charles .. .. .	1,088	Biloela .. ..	483
Bailey, Norman .. .. .	407	Waratah .. ..	422
Bailey, Thomas Guthrie .. .. .	1,100	Monto .. ..	289
Baldwin, Arthur Egbert .. .. .	296	Kalpowar .. ..	347
Bale, Horace Arnold Victor .. .. .	197	Goovigen .. ..	642
Ball, Henry .. .. .	688	Kalpowar .. ..	358
Ball, John .. .. .	1,490	ditto .. ..	359
Ball, Joseph .. .. .	710	ditto .. ..	361
Barbour, Henry Albert .. .. .	1,395	Waratah .. ..	421
Barlow, Daniel Joseph .. .. .	300	Goovigen .. ..	646
Barrett, Colin Stuart (per Stuart Andrew Barrett) .. .. .	2,470	Thangool .. ..	549
Barrett, Stuart Andrew .. .. .	7,500	ditto .. ..	549
Bartlett, William Henry .. .. .	557	Abercorn .. ..	139
Basson, Edward James, on behalf of Jamieson Group .. .. .	719	Mulgeldie .. ..	186
Bassett, Frederick .. .. .	380	Mundubbera .. ..	34
Bate, Arthur Garfield Tucker .. .. .	259	Monto .. ..	237
Batten, Arthur .. .. .	727	Mundubbera .. ..	13
Bayntun, Felix Frederick .. .. .	620	Eidsvold .. ..	82
Beaton, William .. .. .	319	Waratah .. ..	398
Beck, Martin Petersen .. .. .	581	Eidsvold .. ..	73
Becker, Ernest Valentine .. .. .	800	Abercorn .. ..	157
Bell, Percy James .. .. .	486	Mulgeldie .. ..	184
Benecke, Johann Theodor Frederick Carl .. .. .	466	Abercorn .. ..	126
Bestmann, John Henry, Water Finder, Department of Public Lands .. .. .	..	Biloela .. ..	493
Bevan, Walter Edward, Engineer, Public Estate Improvement Section, Department of Public Lands .. .. .	..	ditto .. ..	503
Biekhoff, Francis Joseph .. .. .	244	Goovigen .. ..	629
Birch, Phillip .. .. .	645	Biloela .. ..	462
Birse, Alexander .. .. .	324	Kalpowar .. ..	345
Birse, Arthur William .. .. .	332	ditto .. ..	355
Black, William James .. .. .	764	Eidsvold .. ..	69
Blee, John Edward .. .. .	375	Mundubbera .. ..	49
Boon, George Herbert .. .. .	200	Thangool .. ..	554
Bowles, Ernest Allen .. .. .	403	Kalpowar .. ..	353
Bradley, George Herbert .. .. .	350	Biloela .. ..	432
Brennan, Patrick .. .. .	247	Monto .. ..	256
Bridges, Ernest Henry .. .. .	726	Abercorn .. ..	160
Briggs, John William .. .. .	214	Jambin .. ..	612
Brock, Gerald James .. .. .	298	Goovigen .. ..	644
Brown, Cyril Oswald .. .. .	254	Biloela .. ..	490
Brown, James .. .. .	243	Goovigen .. ..	647
Brown, Robert Edward .. .. .	282	ditto .. ..	645

## Appendix C—continued.

Name of Witness.	Approximate Area Interested in.	Place at which Evidence Given.	Page of Evidence.
Acres.			
Bryans, Edward James .. .. .	320	Waratah .. ..	397
Budahn, August .. .. .	221	Goovigen .. ..	630
Bulow, August Herman .. .. .	149	Mulgeldie .. ..	205
Butler, Andrew, for Butler Group, John H. Falkiner, and James Richard Wood .. .. .	1,609	Jambin .. ..	606
Bysshe, Percy Shelley .. .. .	7,248	Eidsvold .. ..	58
Deputation			
Caley, Walter .. .. .	640	Abercorn .. ..	154
Calder, Robert James, Inspector, Agricultural Bank .. .. .	..	Biloela .. ..	463
Campbell, John Gordon Leslie .. .. .	50,000	Jambin .. ..	586
Campbell, William Blair .. .. .	7,000	ditto .. ..	588
Carmody, Charles Stanislaus .. .. .	373	Monto .. ..	245
Cavanagh, Bartholomew .. .. .	215	ditto .. ..	295
Cavanagh, John .. .. .	251	Jambin .. ..	589
Cavanagh, Patrick Joseph .. .. .	247	ditto .. ..	589
Chamber of Commerce .. .. .	397	Monto .. ..	324
Chandler, Alfred .. .. .	226	Biloela .. ..	428
Chapman, David : also on behalf of Mulgeldie Local Producers' Association .. .. .	157	Mulgeldie .. ..	197
Chapman, Harry .. .. .	1,198	Biloela .. ..	446
Chapman, Herbert Henry .. .. .	250	Monto .. ..	267
Chetter, Richard Edward .. .. .	249	Biloela .. ..	481
Clarke, William Henry .. .. .	1,023	ditto .. ..	470
Clewley, Archibald Josiah .. .. .	473	Waratah .. ..	390
Cluff, Clarence James .. .. .	275	Monto .. ..	248
Collingwood, Isaac Thomas .. .. .	352	Kalpowar .. ..	377
Collingwood, Stanley Harold .. .. .	430	Waratah .. ..	412
Collins, Robert .. .. .	550	Abercorn .. ..	142
Collins, Robert William .. .. .	210	ditto .. ..	141
Connolly, William .. .. .	166	Thangool .. ..	555
Cook, Herbert .. .. .	433	Monto .. ..	297
Cook, John Leslie .. .. .	380	ditto .. ..	242
Cook, Leslie John .. .. .	304	ditto .. ..	242
Cooper, James .. .. .	170	Goovigen .. ..	631
Costar, John Arthur .. .. .	640	Thangool .. ..	545
Costello, Frederick .. .. .	231	Abercorn .. ..	150
Coulson, James .. .. .	159	Jambin .. ..	584
Coulston, Alwyn .. .. .	270	Mulgeldie .. ..	196
Cox, George Robert .. .. .	302	Monto .. ..	294
Cuff, Charles .. .. .	320	ditto .. ..	240
Cullen, John Arthur .. .. .	217	Thangool .. ..	559
Cullwick, Wilfred .. .. .	1,192	Mulgeldie .. ..	203
Currier, Michael Frederick .. .. .	6,900	Abercorn .. ..	178
ditto			
Daetz, Sterling Harold .. .. .	320	ditto .. ..	129
Daft, Thomas .. .. .	575	Waratah .. ..	418
Dahtler, Frederick George .. .. .	176	ditto .. ..	395
Davidson, Joseph James Massey .. .. .	178	Mulgeldie .. ..	217
Dellar, Charles James .. .. .	324	Biloela .. ..	491
Dent, Thomas .. .. .	206	Waratah .. ..	415
Dickenson, Charles .. .. .	338	Jambin .. ..	596
Dicker, Albert Thomas .. .. .	3,200	Kalpowar .. ..	374
Dingle, Roy George .. .. .	185	Abercorn .. ..	131
Dobson, Alfred Henry .. .. .	355	Goovigen .. ..	635
Docherty, Michael .. .. .	643	Monto .. ..	246
Donald, Early William .. .. .	307	Goovigen .. ..	636
Dougall, Andrew George .. .. .	290	Waratah .. ..	414
Dougall, Roy Lewis .. .. .	622	Waratah .. ..	413
Doyle, Felix Frederick .. .. .	648	Eidsvold .. ..	89
Drinkwater, Harold Frank .. .. .	4,040	ditto .. ..	75
Duncan, Horace Muir .. .. .	361	Abercorn .. ..	134
Dunn, Thomas .. .. .	246	Kalpowar .. ..	346
Jambin			
Edwards, Samuel .. .. .	786	ditto .. ..	602
Eggerling, Phillip Fritz .. .. .	216	Mundubbera .. ..	41
Elliott, Francis David .. .. .	5,836	Biloela .. ..	513
Elliott, Robert James, on behalf of Margaret Grace Elliott .. .. .	198	Monto .. ..	301
Emerson, David .. .. .	169	ditto .. ..	302
Emery, Jesse, also on behalf of Mulgeldie Local Producers' Association .. .. .	278	Mulgeldie .. ..	197
Esposito, Salvatore, on behalf Francesco Raschella and Nicodemio Mazzone .. .. .	852	Biloela .. ..	479
Evans, Rupert Sydney Allender .. .. .	..	Eidsvold .. ..	71
Everett, Ernest Willie, Inspector Agricultural Bank .. .. .	..	ditto .. ..	106
ditto			
Falconer, John Frederick Browne .. .. .	634	ditto .. ..	65
Farquharson, Frederick James .. .. .	302	Biloela .. ..	457
Fisher, William Arthur .. .. .	500	Waratah .. ..	424
Fleming, James Patrick .. .. .	373	Biloela .. ..	450
Fleming, James William .. .. .	560	ditto .. ..	452
Fleming, Michael Ambrose .. .. .	330	Kalpowar .. ..	349
Fraser, John .. .. .	343	Monto .. ..	266

## Appendix C—continued.

Name of Witness.	Approximate Area Interested in.	Place at which Evidence Given.	Page of Evidence.
	Acres.		
Giles, Clifford Gorrington .. .. .	1,000	Biloela .. ..	448
Giles, John Victor (per Clifford Gorrington Giles) .. .. .	1,930	ditto .. ..	448
Gillies, John .. .. .	189	Jambin .. ..	610
Gooch, Gordon Victor Ninham .. .. .	350	Monto .. ..	252
Goode, Cedric Fraser .. .. .	619	ditto .. ..	293
Goody, Hector Clyde .. .. .	1,209	Waratah .. ..	406
Goody, Marshall .. .. .	627	ditto .. ..	419
Grant, Frederick .. .. .	238	Mulgeldie .. ..	193
Gray, Ashton John .. .. .	196	Biloela .. ..	472
Grenier, Ernest Pannell, Land Commissioner, Gayndah .. .. .	..	Eidsvold .. ..	109
Hamilton, Robert : also as Chairman, Eidsvold Shire Council .. .. .	503	Eidsvold .. ..	53
Hamilton, Reginald James .. .. .	..	ditto .. ..	114
Hampson, Frederick Ralph .. .. .	640	Abercorn .. ..	176
Hannay, Elliott William Davidson .. .. .	1,280	Monto .. ..	263
Hanvin, Daniel Joseph .. .. .	1,650	Abercorn .. ..	136
Hardwick, Francis William .. .. .	244	Monto .. ..	228
Harris, Henry Leslie .. .. .	159	Thangool .. ..	558
Harris, James William .. .. .	540	Monto .. ..	283
Havilah, George .. .. .	444	Waratah .. ..	388
Hay, Daniel Stewart .. .. .	220	Mulgeldie .. ..	226
Hayden, Henry Hyland .. .. .	1,630	Kalpowa .. ..	357
Heading, William Arthur .. .. .	333	ditto .. ..	350
Heathwood, Robert Samuel .. .. .	566	ditto .. ..	337
Henderson, Inglis John .. .. .	850	Waratah .. ..	409
Hickey, John Michael .. .. .	..	Kalpowa .. ..	371
Hickey, Patrick Francis .. .. .	197	Biloela .. ..	443
Hill, Cecil Stanley .. .. .	266	Kalpowa .. ..	379
Hobson, Herbert Edward .. .. .	263	Monto .. ..	251
Hogg, William Dickson .. .. .	320	Biloela .. ..	455
Horn, John .. .. .	255	Kalpowa .. ..	378
Hourel, Harry .. .. .	917	Eidsvold .. ..	102
Howes, Reginald James .. .. .	295	Monto .. ..	285
Hundtoft, Jacob .. .. .	237	Thangool .. ..	548
Hunting, Ernest George .. .. .	251	Jambin .. ..	613
Hunting, Thomas Joseph .. .. .	30	Monto .. ..	287
Hunting, Vincent William .. .. .	640	Kalpowa .. ..	370
Hutchinson, John .. .. .	530	Waratah .. ..	425
	260	Mulgeldie .. ..	181
Iredale, Tom George .. .. .	283	Biloela .. ..	468
Jackson, Edward Dunlop Mark .. .. .	401	Waratah .. ..	404
Jackson, Elijah .. .. .	304	Thangool .. ..	534
James, John Edward .. .. .	302	Eidsvold .. ..	149
Jameson, John .. .. .	177	Goovigen .. ..	653
Jamieson, Thomas Henry .. .. .	280	Jambin .. ..	583
Jamieson Group, per E. J. Basson .. .. .	719	Mulgeldie .. ..	186
Jarvis, Clarence Frederick .. .. .	740	Monto .. ..	273
Jarvis, William .. .. .	270	Biloela .. ..	492
Jones, Aubrey Edward .. .. .	4,200	Eidsvold .. ..	104
Jones, Lemmewell .. .. .	338	Mulgeldie .. ..	191
Joyce, Fitzpierce .. .. .	1,280	Eidsvold .. ..	96
Kennedy, John .. .. .	2,388	Abercorn .. ..	137
Keunne, Ernst August .. .. .	600	Mundubbera .. ..	18
Keys, Arthur .. .. .	202	Jambin .. ..	609
King, Percival Walter .. .. .	618	Abercorn .. ..	151
King, Selwyn Moore .. .. .	215	Goovigen .. ..	640
Kircher, Michael .. .. .	714	Waratah .. ..	416
Kirkham, Ernest William .. .. .	311	Jambin .. ..	580
Krause, Charles William .. .. .	320	Thangool .. ..	566
Kuhnert, Karl Julius .. .. .	575	Abercorn .. ..	162
Kurtz, James William .. .. .	160	Thangool .. ..	556
Lawson, James Gilbert .. .. .	660	Kalpowa .. ..	351
Lehr, Phillip Henry .. .. .	570	ditto .. ..	376
Leonard, Herbert Cyril .. .. .	345	Monto .. ..	268
Lewis, Cyril .. .. .	344	Mulgeldie .. ..	215
Litzow, Adolph .. .. .	311	ditto .. ..	221
Local Producers' Association .. .. .	Deputation	Biloela .. ..	515
Ditto .. .. .	ditto	Goovigen .. ..	656
Ditto .. .. .	ditto	Jambin .. ..	615
Ditto .. .. .	ditto	Kalpowa .. ..	381
Ditto .. .. .	ditto	Monto .. ..	309
Ditto (per D. Chapman and J. Emery) .. .. .	..	Mulgeldie .. ..	197
Local Producers' Association .. .. .	Deputation	Thangool .. ..	570
Lucey, Daniel James .. .. .	641	Goovigen .. ..	652



## Appendix C—continued.

Name of Witness.	Approximate Area Interested in.	Place at which Evidence Given.	Page of Evidence.
	Acre.		
Macfarlane, Neil Archibald .. .. .	289	Biloela .. ..	487
Mack, Alfred John .. .. .	191	Monto .. ..	241
Malone, Denis Sylvester .. .. .	438	Monto .. ..	230
Malone, Thomas .. .. .	331	ditto .. ..	230
Marshall, James John .. .. .	1,675	Kalpowar .. ..	356
Marshall, Rupert Oswald .. .. .	239	Monto .. ..	257
Mathison, Herbert Hastings .. .. .	357	ditto .. ..	269
Meagher, William .. .. .	171	Jambin .. ..	600
Meharry, Andrew Stewart .. .. .	335	Waratah .. ..	396
Meredith, Charles Thomas .. .. .	328	Mundubbera .. ..	38
Miller, Lawrie Douglas .. .. .	1,619	Monto .. ..	279
Moore, Patrick .. .. .	237	ditto .. ..	288
Moore, Stephen Henry .. .. .	244	ditto .. ..	303
Morante, Alfred Charles .. .. .	118	ditto .. ..	238
Mouatt, Graham Buchanan .. .. .	580	ditto .. ..	281
Muir, William .. .. .	9,440	Mundubbera .. ..	6
Muller, Paul .. .. .	395	Monto .. ..	280
Myles, David Charles .. .. .	1,111	Kalpowar .. ..	375
Myles, Edward .. .. .	633	ditto .. ..	335
McCallum, Robert Alexander .. .. .	832	Eidsvold .. ..	87
McCarthy, Stephen .. .. .	304	Thangool .. ..	562
McCord, Charles Edward Knox .. .. .	25,160	Eidsvold .. ..	101
McCubbin, May Emma, for Andrew Elliott McCubbin .. .. .	388	Mulgeldie .. ..	212
McGuigan, John Richard .. .. .	226	Waratah .. ..	410
McInnes, John .. .. .	334	Monto .. ..	276
McKenzie, Edward John .. .. .	333	ditto .. ..	305
McKinnon, Peter .. .. .	215	ditto .. ..	254
McLennan, William .. .. .	320	Mundubbera .. ..	45
McRae, Christopher Albert .. .. .	280	Biloela .. ..	476
McRae, Godfrey Francis .. .. .	303	ditto .. ..	474
McRae, Francis Murdo .. .. .	343	Mulgeldie .. ..	213
McRobbie, Alexander .. .. .	183	Goovigen .. ..	641
Naldrett, George William .. .. .	335	Monto .. ..	250
Norris, Frank .. .. .	230	Goovigen .. ..	637
Oberg, Marcus William .. .. .	395	Abercorn .. ..	156
O'Brien, Thomas .. .. .	318	Biloela .. ..	436
O'Dwyer, Phillip .. .. .	554	Abercorn .. ..	168
Ogle, James Gordon .. .. .	253	Mulgeldie .. ..	189
Parker, Thomas Arthur .. .. .	279	Biloela .. ..	458
Paroz, William Charles .. .. .	190	ditto .. ..	439
Peachy, Burgess James .. .. .	350	Monto .. ..	286
Peacock, Charles Edgar .. .. .	311	Goovigen .. ..	649
Pearce, Richard .. .. .	218	Jambin .. ..	598
Pearce, William .. .. .	232	ditto .. ..	598
Penberthy, Bert .. .. .	300	Thangool .. ..	568
Perry, Thomas Alexander .. .. .	1,960	Eidsvold .. ..	98
Pershouse, Stephen Bradney .. .. .	265	Jambin .. ..	603
Peters, Henry .. .. .	274	Jambin .. ..	595
Pitman, Josiah Arthur .. .. .	640	Biloela .. ..	480
Pope, John Sydney .. .. .	207	ditto .. ..	482
Porter, Leonard Cyril .. .. .	153	Goovigen .. ..	650
Power, Eric James .. .. .	498	Monto .. ..	290
Power, Francis Michael .. .. .	150	Mulgeldie .. ..	183
Power, James .. .. .	453	Monto .. ..	290
Pownall, John Downman .. .. .	16,800	Eidsvold .. ..	103
Pownall, William Thomas .. .. .	650	Kalpowar .. ..	367
Preuss, Otto .. .. .	189	Goovigen .. ..	638
Price, Percy .. .. .	227	Jambin .. ..	611
Purvis, Henry James .. .. .	..	Thangool .. ..	561
Pywell, Thomas Ashley James .. .. .	410	Kalpowar .. ..	352
Quarrie, Percy Alma .. .. .	206	Biloela .. ..	460
Radel, Alfred Adolf .. .. .	223	Mulgeldie .. ..	209
Ralph, Joseph Heli .. .. .	252	Jambin .. ..	593
Rashleigh, Francis Edward .. .. .	654	Eidsvold .. ..	80
Reinke, John Frederick .. .. .	230	Mundubbera .. ..	21
Rice, Arthur .. .. .	590	Eidsvold .. ..	62
Rickards, Morland Hubert .. .. .	2,227	Mundubbera .. ..	27
Ridgway, Nathaniel James .. .. .	..	Monto .. ..	299
Ridgway, Robert John .. .. .	215	ditto .. ..	299
Rigney, Edward Charles .. .. .	550	Monto .. ..	277
Rigney, Thomas Patrick .. .. .	505	Kalpowar .. ..	332
Rix, Frank Albert .. .. .	297	Mulgeldie .. ..	204
Robertson, Norman Harold .. .. .	313	Thangool .. ..	538

## Appendix C—continued.

Name of Witness.	Approximate Area Interested in.	Place at which Evidence Given.	Page of Evidence.
	Acres.		
Rose, Valentine .. .. .	313	Abercorn .. ..	172
Russell, Edward Alexander .. .. .	180	Thangool .. ..	540
Russell, Leonard John .. .. .	280	ditto .. ..	557
Ryan, John Valentine .. .. .	215	Monto .. ..	298
Sander, Carl Johan .. .. .	1,097	Kalpowa .. ..	340
Schaper, Alfred Ernest .. .. .	1,012	By letter .. ..	654
Schuenemann, Ernest .. .. .	305	Goovigen .. ..	626
Schuenemann, Adolf .. .. .	304	Thangool .. ..	565
Schuurs, Jan William Frederick .. .. .	1,010	Kalpowa .. ..	342
Secker, Frederick George .. .. .	332	Jambin .. ..	604
Secker, William Alfred .. .. .	251	ditto .. ..	605
Shaw, James Alexander .. .. .	366	Goovigen .. ..	633
Sheehan, Patrick Maurice .. .. .	496	Waratah .. ..	423
Shelton, Cornelius .. .. .	241	Biloela .. ..	443
Shire Council .. .. .	Deputation	Eidsvold .. ..	114
Silverthorne, Duncan .. .. .	331	Biloela .. ..	469
Simpson, Joseph Alexander .. .. .	160	Thangool .. ..	564
Slack, Eric George .. .. .	949	Abercorn .. ..	173
Smith, George James .. .. .	713	ditto .. ..	169
Smith, Henry John .. .. .	.. .. .	Eidsvold .. ..	83
Smith, James Osborne .. .. .	1,489	ditto .. ..	94
Smith, Joseph .. .. .	806	Mundubbera .. ..	24
Smith, Norman William .. .. .	590	Waratah .. ..	399
Smith, William Hardidge .. .. .	1,188	Mulgeldie .. ..	220
Staatz, George Carl Friederich .. .. .	235	Monto .. ..	274
Steger, Charles Wilfred .. .. .	351	Mulgeldie .. ..	195
Stephens, George .. .. .	604	Monto .. ..	270
Sutton, Robert Stevin .. .. .	256	Biloela .. ..	478
Sweet, Samuel .. .. .	275	Waratah .. ..	402
Talty, John .. .. .	550	Kalpowa .. ..	366
Tanzer, Arthur .. .. .	540	Abercorn .. ..	163
Taylor, Harry Bernard .. .. .	380	Waratah .. ..	391
Taylor, John Henry Tuke .. .. .	3,536	Eidsvold .. ..	100
Thompson, William Arthur .. .. .	360	Thangool .. ..	533
Thomson, Sydney, Land Ranger, Rockhampton District .. .. .	.. .. .	ditto .. ..	525
Thurgar, John Edward .. .. .	235	Mulgeldie .. ..	222
Towers, Alfred Henry .. .. .	2,030	Abercorn .. ..	148
Traill, Thomas Fotheringham .. .. .	2,253	Abercorn .. ..	132
Tratt, William Henry .. .. .	320	Monto .. ..	259
Tucker, Henry John .. .. .	187	Biloela .. ..	485
Turner, David .. .. .	157	Jambin .. ..	591
Turner, Morris .. .. .	308	Mulgeldie .. ..	219
Tye, William Edward .. .. .	900	Abercorn .. ..	146
Venn, Daniel .. .. .	255	Thangool .. ..	536
Vicary, Henry .. .. .	340	Mundubbera .. ..	31
Vivian, Guy .. .. .	235	Biloela .. ..	456
Wallace, Victor Clarence .. .. .	322	Goovigen .. ..	643
Walter, John Henry .. .. .	450	Monto .. ..	260
Walton, Richard .. .. .	240	ditto .. ..	234
Warren, Darcy Richard .. .. .	293	Waratah .. ..	407
Watson, Thomas .. .. .	188	Goovigen .. ..	623
Webb, Harry George William .. .. .	463	Mulgeldie .. ..	224
Wells, Archibald James .. .. .	914	ditto .. ..	216
Wells, Edward .. .. .	342	Monto .. ..	252
Wells, James Underwood .. .. .	315	ditto .. ..	247
Wendt, Arthur .. .. .	3,736	Abercorn .. ..	145
Wendt, William Charles .. .. .	488	Waratah .. ..	411
West, John .. .. .	6,270	Abercorn .. ..	133
Whyte, William .. .. .	435	ditto .. ..	165
Wickham, Ernest Albert .. .. .	329	Goovigen .. ..	648
Willcox, Gerald Norman .. .. .	280	Biloela .. ..	484
Williams, George .. .. .	923	Eidsvold .. ..	85
Williams, George John .. .. .	500	Waratah .. ..	408
Wilson, Wilfred .. .. .	264	Jambin .. ..	601
Wood, George James .. .. .	520	Waratah .. ..	400
Woodall, Michael John .. .. .	177	Biloela .. ..	488
Woodbridge, Joseph .. .. .	267	Kalpowa .. ..	373
Woodford, Samuel Percival .. .. .	174	Mulgeldie .. ..	185
Wulf, Ernest Richard .. .. .	352	Monto .. ..	261
Young, Gregory .. .. .	7,000	Eidsvold .. ..	105
Zillman, Eric Wesley .. .. .	2,890	Abercorn .. ..	138
Zillman, Arnold Raymond .. .. .	5,339	Eidsvold .. ..	91
Zimmermann, John .. .. .	309	Goovigen .. ..	639

## Appendix D.

## ROSEBANK RAINFALL RECORDS.

Supplied to Land Administration Board by Mr. JOSEPH BALL, of Rosebank, Kalpowar, Upper Burnett District.

## YEARLY RAINFALL.

	Days.	Inches.	Points.
1908 .. .. .	50	35	26
1909 .. .. .	72	35	31
1910 .. .. .	70	31	15
1911 .. .. .	67	33	98
1912 .. .. .	59	24	69
1913 .. .. .	63	40	5
1914 .. .. .	65	28	59
1915 .. .. .	54	21	70
1916 .. .. .	88	37	46
1917 .. .. .	68	34	72
1918 .. .. .	63	40	11
1919 .. .. .	42	13	74
1920 .. .. .	67	31	31
1921 .. .. .	91	40	31
1922 .. .. .	57	31	2
1923 .. .. .	51	23	12
1924 .. .. .	70	42	38
1925 .. .. .	63	32	12
1926 .. .. .	51	28	28
1927 .. .. .	82	46	31
1928 .. .. .	85	45	21

## DAILY RAINFALL.

1908.

Date.	Rainfall. In. Pts.	Total.
January—		
2nd .. .. .	0 35	
9th .. .. .	0 29	
10th .. .. .	0 78	
11th .. .. .	1 3	
29th .. .. .	1 60	
30th .. .. .	0 40	
	6 days	4 in. 45 pts.
February—		
10th .. .. .	1 67	
11th .. .. .	1 59	
12th .. .. .	2 26	
13th .. .. .	0 20	
19th .. .. .	0 25	
21st .. .. .	3 84	
23rd .. .. .	0 11	
24th .. .. .	0 34	
27th .. .. .	0 16	
28th .. .. .	0 32	
	10 days	10 in. 74 pts.
March—		
2nd .. .. .	0 85	
4th .. .. .	0 64	
5th .. .. .	2 2	
6th .. .. .	0 54	
13th .. .. .	0 95	
14th .. .. .	1 24	
15th .. .. .	1 9	
16th .. .. .	0 79	
17th .. .. .	0 15	
	9 days	8 in. 27 pts.
April—		
3rd .. .. .	1 15	
4th .. .. .	0 35	
11th .. .. .	0 96	
	3 days	2 in. 46 pts.
May—		
19th .. .. .	0 80	1 day 0 in. 80 pts.
June—		
21st .. .. .	0 40	1 day 0 in. 40 pts.

Date.	Rainfall. In. Pts.	Total.
July—		
2nd .. .. .	0 13	
10th .. .. .	0 48	
	2 days	0 in. 61 pts.
August—		
2nd .. .. .	0 78	
6th .. .. .	0 45	
23rd .. .. .	0 11	
	3 days	1 in. 34 pts.
September—		
2nd .. .. .	0 3	
6th .. .. .	0 48	
13th .. .. .	0 5	
	3 days	0 in. 56 pts.
October—		
11th .. .. .	0 34	
12th .. .. .	0 43	
13th .. .. .	0 17	
18th .. .. .	0 78	
	4 days	1 in. 72 pts.
November—		
9th .. .. .	1 60	
28th .. .. .	1 39	
	2 days	2 in. 99 pts.
December—		
1st .. .. .	0 4	
10th .. .. .	0 13	
11th .. .. .	0 1	
12th .. .. .	0 3	
26th .. .. .	0 56	
27th .. .. .	0 15	
	6 days	0 in. 92 pts.
Total for year 1908 ..	50 days	35 in. 26 pts.

## 1909.

January—		
6th .. .. .	0 38	
16th .. .. .	0 89	
17th .. .. .	1 4	
18th .. .. .	1 91	
19th .. .. .	0 57	
20th .. .. .	2 22	
21st .. .. .	0 85	
23rd .. .. .	0 95	
	8 days	8 in. 81 pts.
February—		
2nd .. .. .	0 33	
3rd .. .. .	0 19	
22nd .. .. .	0 12	
23rd .. .. .	1 33	
24th .. .. .	0 3	
26th .. .. .	0 36	
	6 days	2 in. 36 pts.
March—		
2nd .. .. .	0 59	
4th .. .. .	0 27	
17th .. .. .	0 73	
21st .. .. .	0 56	
28th .. .. .	1 32	
	5 days	3 in. 47 pts.
April—		
3rd .. .. .	0 14	
7th .. .. .	0 22	
20th .. .. .	0 33	
21st .. .. .	0 44	
22nd .. .. .	0 5	
27th .. .. .	0 49	
	6 days	1 in. 67 pts.
May—		
25th .. .. .	0 23	
31st .. .. .	0 8	
	2 days	0 in. 31 pts.



## Appendix D—continued.

## ROSEBANK RAINFALL RECORDS—continued.

## DAILY RAINFALL—continued.

Date.	1909. Rainfall. In. Pts.	Total.
June—		
1st .. ..	0 10	
3rd .. ..	0 22	
7th .. ..	0 11	
10th .. ..	0 38	
26th .. ..	0 9	
27th .. ..	0 4	
29th .. ..	0 26	
30th .. ..	0 72	
	—	8 days 1 in. 92 pts.
July—		
1st .. ..	0 12	
2nd .. ..	0 60	
8th .. ..	0 19	
16th .. ..	1 4	
17th .. ..	0 3	
26th .. ..	0 18	
	—	6 days 2 in. 16 pts.
August—		
7th .. ..	0 31	
9th .. ..	0 11	
15th .. ..	1 0	
17th .. ..	0 27	
22nd .. ..	0 15	
24th .. ..	0 10	
25th .. ..	0 63	
26th .. ..	1 0	
28th .. ..	0 2	
30th .. ..	0 6	
	—	10 days 3 in. 65 pts.
September—		
3rd .. ..	0 5	
8th .. ..	0 70	
16th .. ..	0 8	
22nd .. ..	0 72	
	—	4 days 1 in. 55 pts.
October—		
20th .. ..	0 29	
22nd .. ..	0 77	
26th .. ..	1 45	
27th .. ..	1 30	
30th .. ..	0 83	
	—	5 days 4 in. 64 pts.
November—		
18th .. ..	0 60	
29th .. ..	0 81	
	—	2 days 1 in. 41 pts.
December—		
1st .. ..	0 24	
5th .. ..	0 40	
16th .. ..	0 52	
17th .. ..	0 14	
18th .. ..	0 22	
21st .. ..	0 10	
23rd .. ..	0 26	
28th .. ..	0 8	
29th .. ..	0 79	
30th .. ..	0 61	
	—	10 days 3 in. 36 pts.
Total for year 1909 ..		
	72 days	35 in. 31 pts.

## 1910.

January—		
13th .. ..	0 27	
14th .. ..	1 71	
15th .. ..	0 35	
16th .. ..	0 36	
18th .. ..	0 43	
19th .. ..	0 70	
21st .. ..	0 16	
22nd .. ..	0 27	
23rd .. ..	0 31	
30th .. ..	1 26	
31st .. ..	1 3	
	—	11 days 6 in. 85 pts.

Date.	Rainfall. In. Pts.	Total.
February—		
1st .. ..	0 10	
2nd .. ..	0 13	
10th .. ..	0 11	
12th .. ..	0 19	
16th .. ..	0 8	
20th .. ..	0 11	
21st .. ..	0 3	
22nd .. ..	0 2	
23rd .. ..	0 26	
	—	9 days 1 in. 3 pts.
March—		
6th .. ..	0 10	
7th .. ..	0 27	
10th .. ..	0 22	
14th .. ..	4 62	
17th .. ..	0 29	
18th .. ..	0 40	
19th .. ..	0 30	
20th .. ..	2 29	
24th .. ..	0 13	
	—	9 days 8 in. 62 pts.
April—		
5th .. ..	0 37	
23th .. ..	0 16	
	—	2 days 0 in. 53 pts.
May—		
17th .. ..	0 7	
	—	1 day 0 in. 7 pts.
June—		
1st .. ..	1 85	
2nd .. ..	0 90	
12th .. ..	0 6	
17th .. ..	0 18	
21st .. ..	0 10	
23rd .. ..	0 69	
24th .. ..	0 16	
25th .. ..	0 24	
	—	8 days 4 in. 18 pts.
July—		
6th .. ..	0 48	
7th .. ..	0 80	
16th .. ..	0 7	
17th .. ..	0 54	
18th .. ..	0 36	
	—	5 days 2 in. 25 pts.
August—		
2nd .. ..	0 23	
31st .. ..	0 2	
	—	2 days 0 in. 25 pts.
September—		
14th .. ..	0 72	
15th .. ..	0 3	
17th .. ..	0 19	
	—	3 days 0 in. 94 pts.
October—		
7th .. ..	0 2	
8th .. ..	0 7	
9th .. ..	1 9	
22nd .. ..	0 2	
31st .. ..	0 13	
	—	5 days 1 in. 33 pts.
November—		
6th .. ..	0 49	
7th .. ..	0 8	
11th .. ..	0 18	
22nd .. ..	0 25	
26th .. ..	0 90	
30th .. ..	0 24	
	—	6 days 2 in. 14 pts.

## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.				Date.	Rainfall.	Total.		
DAILY RAINFALL—continued.					In. Pts.			
Date.	1910.		Total.					
		Rainfall.	In. Pts.					
December—				July—				
5th .. ..	0	87		7th .. ..	0 20			
6th .. ..	0	36		15th .. ..	0 13			
8th .. ..	0	50		19th .. ..	0 25	3 days	0 in.	58 pts.
9th .. ..	0	6		August—				
10th .. ..	0	28		21st .. ..	0 34			
11th .. ..	0	26		22nd .. ..	0 61			
12th .. ..	0	22		23rd .. ..	0 64	3 days	1 in.	59 pts.
13th .. ..	0	20		September—				
23rd .. ..	0	21		23rd .. ..	1 0			
			9 days 2 in. 96 pts.	30th .. ..	0 6	2 days	1 in.	6 pts.
Total for year 1910 ..	70 days	31 in.	15 pts.	October—				
				1st .. ..	0 50			
January—				2nd .. ..	0 6			
4th .. ..	0	37		6th .. ..	0 29			
10th .. ..	0	79		16th .. ..	0 4			
11th .. ..	1	35		19th .. ..	0 57			
12th .. ..	2	31		20th .. ..	0 3			
13th .. ..	0	53		25th .. ..	0 22			
14th .. ..	0	22		29th .. ..	0 15	8 days	1 in.	86 pts.
17th .. ..	0	14		November—				
18th .. ..	0	46		14th .. ..	0 30			
19th .. ..	0	53		17th .. ..	0 24	2 days	0 in.	54 pts.
20th .. ..	0	35		December—				
22nd .. ..	0	3		2nd .. ..	0 6			
24th .. ..	0	9		7th .. ..	0 89			
26th .. ..	0	65		9th .. ..	0 55			
27th .. ..	0	52		11th .. ..	0 48			
28th .. ..	1	15		17th .. ..	0 71			
29th .. ..	1	27		27th .. ..	2 26	6 days	4 in.	95 pts.
30th .. ..	0	13		Total for year 1911 ..	67 days	33 in.	98 pts.	
31st .. ..	0	68						
			18 days 11 in. 57 pts.	1912.				
February—				January—				
1st .. ..	0	25		1st .. ..	0 65			
2nd .. ..	0	6		2nd .. ..	0 34			
3rd .. ..	1	11		5th .. ..	1 31			
4th .. ..	2	81		6th .. ..	0 13			
5th .. ..	0	71		18th .. ..	0 44			
6th .. ..	0	17		28th .. ..	0 18	6 days	3 in.	5 pts.
7th .. ..	0	5		February—				
8th .. ..	0	7		9th .. ..	0 23			
12th .. ..	0	80		10th .. ..	0 9			
13th .. ..	0	74		11th .. ..	0 19			
14th .. ..	0	10		12th .. ..	0 10			
22nd .. ..	0	32		14th .. ..	0 4			
23rd .. ..	0	19		15th .. ..	0 18	6 days	0 in.	83 pts.
			13 days 7 in. 38 pts.	March—				
March—				1st .. ..	1 25			
5th .. ..	0	24		2nd .. ..	0 7			
7th .. ..	0	10		3rd .. ..	0 12			
21st .. ..	0	49		4th .. ..	0 5			
24th .. ..	0	56		14th .. ..	0 5			
25th .. ..	1	45		15th .. ..	0 23			
26th .. ..	0	38		20th .. ..	0 22			
			6 days 3 in. 22 pts.	21st .. ..	0 7			
April—				27th .. ..	0 27	9 days	2 in.	13 pts.
13th .. ..	0	7		April—				
17th .. ..	0	75		9th .. ..	0 19			
18th .. ..	0	11		10th .. ..	0 4	2 days	0 in.	23 pts.
			3 days 0 in. 93 pts.	May—				
May—				5th .. ..	0 31			
16th .. ..	0	12		6th .. ..	1 5			
19th .. ..	0	10		20th .. ..	0 5	3 days	1 in.	41 pts.
21st .. ..	0	8						
			3 days 0 in. 30 pts.					
June—								
	Nil.							

## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.				Date.	Rainfall.	Total.
DAILY RAINFALL—continued.					In. Pts.	
Date.	1912.		Total.			
	Rainfall.					
	In. Pts.					
June—				February—		
5th .. ..	0 2			2nd .. ..	0 51	
9th .. ..	2 75			8th .. ..	0 22	
10th .. ..	0 52			10th .. ..	0 17	
11th .. ..	0 46			11th .. ..	0 25	
12th .. ..	0 51			18th .. ..	2 2	
23rd .. ..	0 55			21st .. ..	0 8	
24th .. ..	1 91			23rd .. ..	0 39	
27th .. ..	0 6			25th .. ..	0 32	
28th .. ..	0 31			26th .. ..	0 8	
29th .. ..	0 3			27th .. ..	0 10	
	—	10 days	7 in. 12 pts.	28th .. ..	0 8	
July—					11 days	4 in. 22 pts.
2nd .. ..	0 27			March—		
3rd .. ..	0 12			3rd .. ..	0 13	
4th .. ..	0 62			8th .. ..	0 24	
14th .. ..	1 35			13th .. ..	0 96	
	—	4 days	2 in. 36 pts.		3 days	1 in. 33 pts.
August—				April—		
4th .. ..	0 15			6th .. ..	0 86	
11th .. ..	0 10			12th .. ..	0 54	
14th .. ..	0 15				2 days	1 in. 40 pts.
	—	3 days	0 in. 40 pts.	May—		
September—				11th .. ..	0 25	
19th .. ..	0 10	1 day	0 in. 10 pts.	12th .. ..	0 44	
October—				13th .. ..	0 42	
13th .. ..	0 79			23rd .. ..	0 25	
21st .. ..	0 5			25th .. ..	0 19	
23rd .. ..	0 3			30th .. ..	0 31	
24th .. ..	0 58			31st .. ..	0 62	
25th .. ..	0 35				7 days	2 in. 48 pts.
26th .. ..	0 10			June—		
27th .. ..	0 30			21st .. ..	0 54	
	—	7 days	2 in. 20 pts.	22nd .. ..	1 30	
November—				26th .. ..	0 45	
9th .. ..	0 75			29th .. ..	0 67	
21st .. ..	0 47				4 days	2 in. 96 pts.
23rd .. ..	0 18			July—		
26th .. ..	0 33			4th .. ..	0 14	
	—	4 days	1 in. 73 pts.	14th .. ..	1 22	
December—				27th .. ..	0 17	
6th .. ..	0 22			28th .. ..	0 8	
11th .. ..	0 29				4 days	1 in. 61 pts.
21st .. ..	0 7			August—		
31st .. ..	2 55				Nil.	
	—	4 days	3 in. 13 pts.	September—		
Total for year 1912 ..	59 days	24 in.	69 pts.	5th .. ..	0 11	
				21st .. ..	0 38	
				22nd .. ..	0 9	
				27th .. ..	1 27	
				28th .. ..	0 77	
					5 days	2 in. 62 pts.
				October—		
					Nil.	
				November—		
				1st .. ..	0 4	
				3rd .. ..	0 30	
				15th .. ..	0 60	
				22nd .. ..	0 10	
				23rd .. ..	0 13	
					5 days	1 in. 17 pts.
				December—		
				5th .. ..	0 10	
				11th .. ..	0 30	
				16th .. ..	0 5	
				17th .. ..	0 13	
				20th .. ..	1 93	
				21st .. ..	0 14	
				22nd .. ..	0 30	
				23rd .. ..	0 42	
				24th .. ..	0 25	
				27th .. ..	0 9	
					10 days	3 in. 71 pts.
				Total for year 1913 ..	63 days	40 in. 5 pts.
1913.						
January—						
1st .. ..	0 96					
2nd .. ..	0 25					
5th .. ..	0 10					
8th .. ..	2 83					
9th .. ..	0 9					
14th .. ..	0 25					
15th .. ..	3 42					
16th .. ..	4 29					
17th .. ..	1 93					
18th .. ..	1 18					
21st .. ..	3 14					
22nd .. ..	0 11					
	—	12 days	18 in. 55 pts.			



## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.			Date.	Rainfall.	Total.
DAILY RAINFALL—continued.				In. Pts.	
1914.					
Date.	Rainfall.	Total.			
	In. Pts.				
January—			October—		
15th	0 20		6th	0 5	
18th	0 44		7th	0 21	
19th	0 93		8th	0 58	
21st	0 55		9th	1 54	
24th	0 21		10th	0 8	
25th	0 24		11th	0 7	
		6 days 2 in. 57 pts.	12th	0 40	
			17th	0 11	
			18th	0 33	
				9 days 3 in. 37 pts.	
February—			November—		
23rd	1 58		29th	0 5	1 day 0 in. 5 pts.
24th	0 13				
26th	0 21		December—		
27th	0 16		7th	0 34	
28th	0 9		17th	0 51	
		5 days 2 in. 17 pts.	23rd	0 85	
			24th	0 95	
March—			28th	0 48	
1st	1 56		29th	0 28	
9th	0 61		30th	0 8	
10th	0 47		31st	0 98	
11th	0 9			8 days 4 in. 47 pts.	
25th	1 70				
26th	0 30		Total for year 1914	65 days 28 in. 59 pts.	
27th	0 21				
29th	0 40				
30th	0 40				
		9 days 5 in. 74 pts.			
April—			1915.		
9th	1 50		January—		
13th	0 34		1st	0 28	
15th	0 47		5th	0 98	
22nd	0 36		7th	1 6	
23rd	0 40		13th	0 3	
		5 days 3 in. 7 pts.	17th	0 9	
			18th	0 52	
May—			19th	0 4	
3rd	0 6			7 days 3 in. 0 pts.	
22nd	0 26		February—		
24th	0 9		5th	0 20	
		3 days 0 in. 41 pts.	6th	0 35	
June—			8th	0 30	
5th	0 35		9th	3 15	
7th	1 54		17th	0 5	
14th	0 24		18th	0 60	
16th	0 20		19th	0 15	
17th	0 77		20th	0 2	
23rd	0 33		21st	0 18	
25th	0 72		23rd	0 19	
26th	0 71		26th	0 68	
30th	0 7			11 days 5 in. 87 pts.	
		9 days 4 in. 93 pts.			
July—			March—		
2nd	0 9			Nil.	
13th	0 13		April—		
27th	0 27		5th	0 12	
30th	0 57		9th	0 2	
		4 days 1 in. 6 pts.	11th	0 79	
August—			12th	0 40	
1st	0 9		13th	0 10	
2nd	0 11		14th	0 37	
		2 days 0 in. 20 pts.	16th	0 5	
September—			23rd	1 18	
6th	0 4			8 days 3 in. 3 pts.	
9th	0 27		May—		
10th	0 2		2nd	0 8	
13th	0 22		5th	0 39	
		4 days 0 in. 55 pts.	15th	0 14	
			16th	0 71	
				4 days 1 in. 32 pts.	
			June—		
			8th	0 47	1 day 0 in. 47 pts.

## DAILY RAINFALL—continued.

			1916.			
January—						
2nd	..	..	0 3			
3rd	..	..	0 23			
4th	..	..	0 6			
23rd	..	..	0 24			
29th	..	..	0 5			
30th	..	..	0 24			
31st	..	..	0 10			
				—	7 days	0 in. 95 pts.
February—						
3rd	..	..	0 70			
5th	..	..	0 28			
6th	..	..	1 40			
22nd	..	..	0 8			
23rd	..	..	0 22			
27th	..	..	1 0			
28th	..	..	0 48			
				—	7 days	4 in. 16 pts.
March—						
1st	..	..	0 35			
3rd	..	..	0 38			
4th	..	..	0 10			
5th	..	..	0 6			
14th	..	..	0 10			
21st	..	..	1 60			
29th	..	..	0 35			
30th	..	..	0 27			
				—	8 days	3 in. 21 pts.

Date.	Rainfall.		Total.	
	In. Pts.			
April—				
4th	..	0 43		
6th	..	0 45		
9th	..	0 4		
11th	..	0 25		
12th	..	0 6		
13th	..	0 82		
21st	..	0 4		
25th	..	0 13		
30th	..	0 6		
		—	9 days	2 in. 28 pts.
May—				
3rd	..	0 46		
6th	..	0 73		
7th	..	0 30		
		—	3 days	1 in. 49 pts.
June—				
2nd	..	0 20		
9th	..	0 4		
12th	..	0 4		
17th	..	0 40		
21st	..	0 54		
28th	..	0 72		
		—	6 days	1 in. 94 pts.
July—				
12th	..	0 13		
20th	..	2 7		
21st	..	0 50		
29th	..	0 9		
30th	..	0 25		
31st	..	0 38		
		—	6 days	3 in. 42 pts.
August—				
1st	..	0 17		
11th	..	0 6		
16th	..	0 72		
20th	..	0 74		
30th	..	0 11		
31st	..	0 27		
		—	6 days	2 in. 7 pts.
September—				
2nd	..	0 45		
3rd	..	0 35		
5th	..	0 6		
9th	..	0 33		
21st	..	0 15		
22nd	..	0 11		
25th	..	0 23		
		—	7 days	1 in. 68 pts.
October—				
5th	..	0 4		
6th	..	0 4		
18th	..	1 4		
19th	..	1 67		
23rd	..	0 2		
26th	..	0 71		
28th	..	3 77		
		—	7 days	7 in. 29 pts.
November—				
1st	..	0 46		
2nd	..	0 47		
3rd	..	0 34		
5th	..	0 6		
13th	..	0 36		
14th	..	0 5		
24th	..	0 32		
28th	..	0 44		
29th	..	0 21		
30th	..	1 20		
		—	10 days	3 in. 91 pts.

## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.				Date.	Rainfall.	Total.	
DAILY RAINFALL—continued.					In. Pts.		
Date.	1916.	Rainfall.	Total.				
		In. Pts.					
December—				August—			
3rd .. ..	0 24			5th .. ..	0 24		
5th .. ..	2 0			6th .. ..	0 54		
6th .. ..	0 25			27th .. ..	0 50		
7th .. ..	0 43			28th .. ..	0 44		
14th .. ..	0 70			29th .. ..	0 10		
24th .. ..	0 3			September—		5 days	1 in. 82 pts.
25th .. ..	0 7			9th .. ..	0 5		
26th .. ..	0 8			16th .. ..	0 34		
27th .. ..	0 76			18th .. ..	0 36		
28th .. ..	0 18			19th .. ..	0 20		
29th .. ..	0 25			24th .. ..	0 47		
31st .. ..	0 7			25th .. ..	0 86		
		12 days	5 in. 6 pts.	October—		6 days	2 in. 28 pts.
Total for year 1916 ..	88 days	37 in.	46 pts.	1st .. ..	0 19		
				7th .. ..	1 15		
				8th .. ..	0 8		
				24th .. ..	0 7		
				November—		4 days	1 in. 49 pts.
January—	1917.			3rd .. ..	0 6		
5th .. ..	0 3			4th .. ..	3 0		
14th .. ..	0 29			5th .. ..	0 4		
15th .. ..	0 90			8th .. ..	2 18		
16th .. ..	0 92			9th .. ..	1 15		
17th .. ..	0 3			10th .. ..	0 42		
19th .. ..	0 9			16th .. ..	0 77		
20th .. ..	0 2			18th .. ..	0 55		
21st .. ..	0 5			22nd .. ..	0 28		
24th .. ..	0 80			23rd .. ..	1 33		
25th .. ..	0 98			December—		10 days	9 in. 78 pts.
		10 days	4 in. 11 pts.	1st .. ..	0 6		
February—				2nd .. ..	0 46		
1st .. ..	0 81			9th .. ..	0 12		
2nd .. ..	1 53			12th .. ..	1 17		
3rd .. ..	0 77			20th .. ..	0 16		
4th .. ..	1 32			21st .. ..	0 28		
5th .. ..	0 16			24th .. ..	0 75		
10th .. ..	0 15					7 days	3 in. 0 pts.
11th .. ..	0 75			Total for year 1917 ..	68 days	34 in.	72 pts.
		7 days	5 in. 49 pts.				
March—				1918.			
2nd .. ..	0 33			January—			
3rd .. ..	0 5			3rd .. ..	0 43		
5th .. ..	0 73			4th .. ..	1 3		
6th .. ..	0 21			5th .. ..	0 7		
7th .. ..	0 70			9th .. ..	0 9		
8th .. ..	0 34			10th .. ..	0 42		
9th .. ..	0 40			11th .. ..	1 52		
12th .. ..	0 18			12th .. ..	3 70		
17th .. ..	0 45			16th .. ..	3 85		
22nd .. ..	0 4			21st .. ..	1 28		
23rd .. ..	0 14			22nd .. ..	7 11		
		11 days	3 in. 57 pts.	23rd .. ..	1 77		
April—				24th .. ..	0 12		
7th .. ..	0 59			29th .. ..	0 90		
9th .. ..	1 40			30th .. ..	0 35		
22nd .. ..	0 20			31st .. ..	0 43		
30th .. ..	0 9			February—		15 days	23 in. 7 pts.
		4 days	2 in. 28 pts.	1st .. ..	0 31		
May—				2nd .. ..	0 88		
2nd .. ..	0 12			6th .. ..	0 10		
3rd .. ..	0 43			7th .. ..	0 5		
		2 days	0 in. 55 pts.	8th .. ..	0 5		
June—				11th .. ..	0 88		
8th .. ..	0 17	1 day	0 in. 17 pts.	12th .. ..	0 86		
July—				13th .. ..	0 14		
12th .. ..	0 18	1 day	0 in. 18 pts.	20th .. ..	0 8		
				24th .. ..	0 90		
				25th .. ..	0 87		
				28th .. ..	0 31		
						12 days	5 in. 43 pts.



## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.				Date.	Rainfall.	Total.
DAILY RAINFALL—continued.					In. Pts.	
1918.						
Date.		Rainfall.	Total.			
		In. Pts.				
March—				March—		
1st	..	0 13		1st	.. 0 59	
2nd	..	0 32		2nd	.. 0 80	
3rd	..	0 57		3rd	.. 0 55	
4th	..	0 23		6th	.. 0 3	
22nd	..	0 50		27th	.. 0 50	
23rd	..	0 20		28th	.. 0 50	
24th	..	0 18		29th	.. 0 14	
28th	..	0 70		31st	.. 0 8	
		—	8 days 2 in. 83 pts.		8 days 3 in. 19 pts.	
April—				April—		
8th	..	0 31		12th	.. 0 8	
23rd	..	0 22		24th	.. 1 32	
24th	..	0 44		25th	.. 0 8	
25th	..	1 64		26th	.. 0 9	
26th	..	0 86			4 days 1 in. 57 pts.	
27th	..	0 9		May—		
		—	6 days 3 in. 56 pts.	3rd	.. 0 3	
May—				5th	.. 0 47	
8th	..	0 30		6th	.. 0 35	
11th	..	0 3		7th	.. 0 8	
12th	..	0 16		8th	.. 0 5	
17th	..	0 27		9th	.. 0 13	
		—	4 days 0 in. 76 pts.	11th	.. 0 9	
June—				21st	.. 0 26	
		Nil.		22nd	.. 0 68	
July—					9 days 2 in. 14 pts.	
25th	..	0 4	1 day 0 in. 4 pts.	June—	Nil.	
August—				July—	Nil.	
5th	..	0 42		August—		
6th	..	0 21		26th	.. 0 61	
7th	..	0 6		27th	.. 0 4	
24th	..	0 4			2 days 0 in. 65 pts.	
31st	..	0 4		September—		
		—	5 days 0 in. 77 pts.		Nil.	
September—				October—		
5th	..	0 48	1 day 0 in. 48 pts.	9th	.. 0 9	
October—				16th	.. 0 75	
11th	..	0 13	1 day 0 in. 13 pts.	17th	.. 0 30	
November—				22nd	.. 0 39	
1st	..	0 41		28th	.. 0 50	
16th	..	0 5			5 days 2 in. 3 pts.	
19th	..	0 9		November—		
20th	..	0 43		23rd	.. 0 30	1 day 0 in. 30 pts.
21st	..	0 19		December—		
		—	5 days 1 in. 17 pts.	4th	.. 0 5	
December—				16th	.. 0 3	
18th	..	0 60		30th	.. 0 5	
19th	..	0 27			3 days 0 in. 13 pts.	
20th	..	0 18		Total for year 1919 ..	42 days 13 in. 74 pts.	
26th	..	0 17				
27th	..	0 65				
		—	5 days 1 in. 87 pts.			
Total for year 1918 ..	63 days 40 in. 11 pts.					
1919.				1920.		
January—				January—		
3rd	..	0 3		2nd	.. 4 57	
15th	..	0 42		3rd	.. 0 4	
16th	..	0 37		4th	.. 1 7	
18th	..	0 24		5th	.. 0 24	
30th	..	0 50		7th	.. 0 25	
		—	5 days 1 in. 56 pts.	8th	.. 0 52	
February—				9th	.. 0 68	
13th	..	0 14		11th	.. 0 83	
14th	..	0 25		20th	.. 0 33	
18th	..	0 11		21st	.. 0 61	
20th	..	0 2		22nd	.. 0 8	
21st	..	1 65			11 days 9 in. 22 pts.	
		—	5 days 2 in. 17 pts.	February—		
				7th	.. 0 31	1 day 0 in. 31 pts.

## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.				Date.	Rainfall. In. Pts.	Total.
DAILY RAINFALL—continued.						
	1920.					
Date.	Rainfall. In. Pts.	Total.				
March—				December—		
2nd .. ..	0 64			3rd .. ..	0 52	
3rd .. ..	0 36			7th .. ..	1 17	
4th .. ..	0 20			8th .. ..	1 31	
5th .. ..	0 6			9th .. ..	0 14	
9th .. ..	0 28				4 days	3 in. 14 pts.
30th .. ..	0 4			Total for year 1920 ..	67 days	31 in. 31 pts.
31st .. ..	0 5					
	7 days	1 in. 63 pts.				
April—						
10th .. ..	0 3			1921.		
16th .. ..	0 5			January—		
19th .. ..	0 13			8th .. ..	0 15	
21st .. ..	0 6			14th .. ..	0 90	
22nd .. ..	0 31			15th .. ..	1 13	
23rd .. ..	0 3			16th .. ..	0 69	
29th .. ..	0 7			17th .. ..	2 9	
	7 days	0 in. 68 pts.		18th .. ..	0 25	
May—				19th .. ..	0 18	
8th .. ..	0 75			24th .. ..	0 5	
9th .. ..	0 30			28th .. ..	0 9	
16th .. ..	0 69			29th .. ..	0 8	
17th .. ..	0 65			30th .. ..	0 17	
22nd .. ..	0 5			31st .. ..	0 12	
23rd .. ..	0 45				12 days	5 in. 90 pts.
25th .. ..	0 16			February—		
26th .. ..	0 12			7th .. ..	1 14	
28th .. ..	0 4			8th .. ..	0 16	
	9 days	3 in. 21 pts.		15th .. ..	0 3	
June—				20th .. ..	0 20	
2nd .. ..	0 3			21st .. ..	0 7	
3rd .. ..	0 14			24th .. ..	0 8	
13th .. ..	1 76			28th .. ..	0 8	
14th .. ..	0 11				7 days	1 in. 76 pts.
28th .. ..	0 6			March—		
	5 days	2 in. 10 pts.		5th .. ..	0 7	
July—				7th .. ..	0 67	
3rd .. ..	0 10			8th .. ..	0 18	
4th .. ..	0 12			9th .. ..	0 25	
5th .. ..	0 64			10th .. ..	0 40	
15th .. ..	0 40			11th .. ..	0 11	
16th .. ..	0 2			12th .. ..	0 6	
	5 days	1 in. 28 pts.		13th .. ..	0 6	
August—				14th .. ..	0 8	
1st .. ..	0 62			30th .. ..	0 38	
29th .. ..	0 25			31st .. ..	0 18	
30th .. ..	0 71				11 days	2 in. 44 pts.
	3 days	1 in. 58 pts.		April—		
September—				1st .. ..	0 10	
11th .. ..	0 37			2nd .. ..	0 8	
12th .. ..	0 8			3rd .. ..	0 3	
16th .. ..	0 75			4th .. ..	0 11	
18th .. ..	0 14			6th .. ..	0 90	
	4 days	1 in. 34 pts.		12th .. ..	0 14	
October—				15th .. ..	0 3	
16th .. ..	0 19			16th .. ..	0 5	
17th .. ..	1 57			17th .. ..	0 7	
18th .. ..	0 36			29th .. ..	0 3	
21st .. ..	1 26			30th .. ..	0 5	
22nd .. ..	0 74				11 days	1 in. 59 pts.
24th .. ..	0 23			May—		
	6 days	4 in. 35 pts.		2nd .. ..	0 16	
November—				6th .. ..	0 7	
17th .. ..	0 22			16th .. ..	0 95	
18th .. ..	0 61			21st .. ..	0 48	
22nd .. ..	1 31			25th .. ..	0 4	
27th .. ..	0 21				5 days	1 in. 70 pts.
28th .. ..	0 12			June—		
	5 days	2 in. 47 pts.		5th .. ..	0 25	
				9th .. ..	1 20	
				10th .. ..	2 14	
				11th .. ..	1 80	
				13th .. ..	0 9	
				24th .. ..	0 7	
				26th .. ..	0 20	
				30th .. ..	0 17	
					8 days	5 in. 92 pts.

## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.  
DAILY RAINFALL—continued.

Date.	1921. Rainfall. In. Pts.	Total.
July—		
1st .. ..	2 0	
4th .. ..	0 22	
9th .. ..	0 5	
11th .. ..	0 15	
12th .. ..	0 7	
20th .. ..	0 5	
21st .. ..	0 8	
22nd .. ..	0 26	
August—	8 days	2 in. 88 pts.
17th .. ..	0 68	
28th .. ..	0 80	
30th .. ..	0 6	
31st .. ..	0 47	
September—	4 days	2 in. 1 pt.
5th .. ..	0 20	
7th .. ..	0 18	
8th .. ..	0 4	
9th .. ..	0 5	
15th .. ..	0 9	
October—	5 days	0 in. 56 pts.
2nd .. ..	0 36	
10th .. ..	0 13	
11th .. ..	0 10	
12th .. ..	0 41	
15th .. ..	0 52	
23rd .. ..	0 9	
November—	6 days	1 in. 61 pts.
14th .. ..	0 90	
21st .. ..	0 13	
28th .. ..	0 4	
29th .. ..	1 11	
30th .. ..	0 14	
December—	5 days	2 in. 32 pts.
11th .. ..	0 36	
16th .. ..	0 35	
25th .. ..	0 8	
26th .. ..	1 3	
27th .. ..	3 40	
28th .. ..	1 96	
29th .. ..	1 72	
30th .. ..	1 98	
31st .. ..	0 74	
	9 days	11 in. 62 pts.
Total for year 1921 ..	91 days	40 in. 31 pts.

Date.	1922. Rainfall. In. Pts.	Total.
January—		
1st .. ..	0 81	
6th .. ..	0 9	
7th .. ..	0 70	
9th .. ..	0 55	
15th .. ..	0 31	
16th .. ..	0 23	
17th .. ..	0 3	
22nd .. ..	0 32	
30th .. ..	0 22	
31st .. ..	3 52	
February—	10 days	6 in. 78 pts.
1st .. ..	0 14	
2nd .. ..	2 74	
3rd .. ..	0 23	
4th .. ..	1 69	
5th .. ..	0 72	
9th .. ..	0 43	

Date.	Rainfall. In. Pts.	Total.
February—continued.		
10th .. ..	0 8	
20th .. ..	0 22	
27th .. ..	0 92	
28th .. ..	0 12	
	10 days	7 in. 29 pts.
March—	1 day	0 in. 45 pts.
1st .. ..	0 45	
April—	1 day	0 in. 15 pts.
17th .. ..	0 15	
May—	2 days	0 in. 54 pts.
22nd .. ..	0 21	
29th .. ..	0 33	
June—	6 days	2 in. 72 pts.
11th .. ..	0 50	
12th .. ..	0 86	
19th .. ..	0 9	
21st .. ..	0 7	
29th .. ..	1 18	
30th .. ..	0 2	
July—	4 days	2 in. 10 pts.
8th .. ..	0 76	
9th .. ..	1 24	
13th .. ..	0 4	
16th .. ..	0 6	
August—	2 days	0 in. 95 pts.
23rd .. ..	0 67	
29th .. ..	0 28	
September—	2 days	0 in. 15 pts.
13th .. ..	0 4	
21st .. ..	0 11	
October—	2 days	0 in. 68 pts.
22nd .. ..	0 15	
25th .. ..	0 53	
November—	5 days	3 in. 73 pts.
17th .. ..	0 15	
20th .. ..	0 62	
21st .. ..	0 4	
26th .. ..	2 83	
27th .. ..	0 9	
December—	12 days	5 in. 48 pts.
8th .. ..	0 12	
9th .. ..	0 12	
10th .. ..	0 5	
14th .. ..	0 11	
15th .. ..	1 38	
16th .. ..	0 35	
18th .. ..	0 10	
19th .. ..	1 50	
20th .. ..	0 22	
21st .. ..	0 9	
22nd .. ..	1 31	
26th .. ..	0 13	
Total for year 1922 ..	57 days	31 in. 2 pts.

Date.	1923. Rainfall. In. Pts.	Total.
January—		
2nd .. ..	0 3	
3rd .. ..	0 81	
7th .. ..	0 65	
8th .. ..	0 13	
9th .. ..	0 38	
10th .. ..	0 24	
11th .. ..	0 95	
12th .. ..	0 40	
26th .. ..	1 26	
	9 days	4 in. 85 pts.



## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.  
DAILY RAINFALL—continued.

Date.	1923. Rainfall. In. Pts.	Total.
February—		
3rd .. ..	0 49	
11th .. ..	0 11	
March—	—	2 days 0 in. 60 pts.
2nd .. ..	0 60	
3rd .. ..	0 43	
April—	—	2 days 1 in. 3 pts.
10th .. ..	0 5	
11th .. ..	2 49	
16th .. ..	0 4	
17th .. ..	0 3	
24th .. ..	0 9	
25th .. ..	0 21	
27th .. ..	1 90	
May—	—	7 days 4 in. 81 pts.
	Nil.	
June—		
4th .. ..	1 55	
5th .. ..	1 84	
25th .. ..	0 40	
July—	—	3 days 3 in. 79 pts.
1st .. ..	0 28	
27th .. ..	0 36	
28th .. ..	0 28	
August—	—	3 days 0 in. 92 pts.
20th .. ..	0 30	
September—		
4th .. ..	0 53	
5th .. ..	0 37	
October—	—	2 days 0 in. 90 pts.
18th .. ..	0 5	
21st .. ..	0 4	
31st .. ..	0 19	
November—	—	3 days 0 in. 28 pts.
1st .. ..	0 18	
2nd .. ..	0 5	
4th .. ..	0 6	
9th .. ..	0 60	
13th .. ..	0 27	
15th .. ..	0 3	
December—	—	6 days 1 in. 19 pts.
1st .. ..	1 10	
2nd .. ..	0 17	
4th .. ..	0 30	
5th .. ..	0 4	
8th .. ..	0 11	
12th .. ..	0 8	
15th .. ..	0 3	
21st .. ..	0 6	
22nd .. ..	1 74	
23rd .. ..	0 5	
26th .. ..	0 53	
27th .. ..	0 23	
29th .. ..	0 1	
	—	13 days 4 in. 45 pts.
Total for year 1923 .. 51 days 23 in. 12 pts.		

1924.		
January—		
22nd .. ..	0 27	
23rd .. ..	0 4	
30th .. ..	3 0	
	—	3 days 3 in. 31 pts.

Date.	Rainfall. In. Pts.	Total.
February—		
1st .. ..	0 30	
5th .. ..	0 25	
6th .. ..	0 8	
8th .. ..	0 44	
11th .. ..	0 40	
12th .. ..	0 38	
14th .. ..	0 10	
15th .. ..	1 23	
16th .. ..	0 73	
18th .. ..	0 7	
19th .. ..	0 18	
20th .. ..	0 38	
22nd .. ..	1 21	
	—	13 days 5 in. 75 pts.
March—		
6th .. ..	0 19	
7th .. ..	0 71	
8th .. ..	1 61	
9th .. ..	0 7	
14th .. ..	0 16	
23rd .. ..	0 10	
25th .. ..	0 47	
28th .. ..	1 39	
	—	8 days 4 in. 70 pts.
April—		
3rd .. ..	0 50	
7th .. ..	0 12	
8th .. ..	0 23	
9th .. ..	0 34	
10th .. ..	1 60	
	—	5 days 2 in. 79 pts.
May—	Nil.	
June—		
11th .. ..	1 30	
12th .. ..	0 12	
13th .. ..	0 3	
	—	3 days 1 in. 45 pts.
July—		
6th .. ..	0 2	
8th .. ..	0 35	
9th .. ..	3 61	
10th .. ..	0 30	
11th .. ..	0 24	
12th .. ..	0 3	
22nd .. ..	0 79	
23rd .. ..	0 3	
24th .. ..	0 10	
25th .. ..	0 27	
	—	10 days 5 in. 74 pts.
August—		
13th .. ..	0 18	
29th .. ..	0 33	
30th .. ..	0 44	
31st .. ..	0 6	
	—	4 days 1 in. 1 pt.
September—		
25th .. ..	0 22	
29th .. ..	1 37	
	—	2 days 1 in. 59 pts.
October—		
6th .. ..	0 68	
20th .. ..	0 23	
21st .. ..	0 87	
22nd .. ..	0 40	
31st .. ..	0 22	
	—	5 days 2 in. 40 pts.



## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.				
DAILY RAINFALL—continued.				
1926.				
Date.	Rainfall.	Total.		
June—	In. Pts.			
7th	.. .. 0 72			
20th	.. .. 0 21			
22nd	.. .. 0 8			
23rd	.. .. 0 52			
24th	.. .. 0 19			
25th	.. .. 0 8			
		<hr/>		
July—		6 days	1 in.	80 pts.
8th	.. .. 0 22	1 day	0 in.	22 pts.
August—				
Nil.				
September—				
7th	.. .. 0 34			
9th	.. .. 0 7			
17th	.. .. 0 7			
20th	.. .. 0 3			
26th	.. .. 0 13			
27th	.. .. 1 10			
		<hr/>		
October—		6 days	1 in.	74 pts.
15th	.. .. 0 33	1 day	0 in.	33 pts.
November—				
16th	.. .. 0 44			
25th	.. .. 0 50			
		<hr/>		
December—		2 days	0 in.	94 pts.
3rd	.. .. 1 7			
7th	.. .. 0 25			
8th	.. .. 0 13			
13th	.. .. 0 15			
14th	.. .. 0 31			
15th	.. .. 0 94			
16th	.. .. 1 7			
17th	.. .. 0 30			
20th	.. .. 1 54			
21st	.. .. 2 30			
28th	.. .. 1 4			
30th	.. .. 0 55			
31st	.. .. 0 72			
		<hr/>		
		13 days	10 in.	37 pts.
Total for year 1926 .. 51 days 28 in. 28 pts.				

			1927.			
January—						
2nd	..	..	0 28			
5th	..	..	0 13			
18th	..	..	4 12			
19th	..	..	0 91			
20th	..	..	1 3			
21st	..	..	0 73			
22nd	..	..	0 4			
23rd	..	..	0 39			
24th	..	..	0 40			
25th	..	..	0 25			
26th	..	..	0 35			
27th	..	..	0 7			
29th	..	..	0 72			
			—	13 days	9 in.	42 pts.
February—						
2nd	..	..	1 82			
5th	..	..	0 80			
6th	..	..	0 44			
13th	..	..	0 10			
22nd	..	..	0 20			
23rd	..	..	0 56			
			—	6 days	3 in.	92 pts.
March—						
2nd	..	..	0 13			
3rd	..	..	0 9			
4th	..	..	0 30			
5th	..	..	0 7			
6th	..	..	0 20			
7th	..	..	0 18			
8th	..	..	0 13			

Date.	Rainfall.		Total.		
		In. Pts.			
March— <i>continued.</i>					
13th	..	2 80			
14th	..	0 75			
23rd	..	0 47			
24th	..	1 9			
25th	..	1 50			
26th	..	0 40			
April—			13 days	8 in.	11 pts.
1st	..	0 51			
2nd	..	3 45			
6th	..	0 14			
18th	..	0 45			
27th	..	0 9			
May—			5 days	4 in.	64 pts.
12th	..	0 15	1 day	0 in.	15 pts.
June—					
4th	..	3 30			
5th	..	0 90			
17th	..	0 35			
18th	..	0 9			
July—			4 days	4 in.	64 pts.
7th	..	0 24			
8th	..	0 5			
22nd	..	0 18			
23rd	..	0 32			
August—			4 days	0 in.	79 pts.
2nd	..	0 4			
5th	..	0 18			
6th	..	0 3			
27th	..	0 35			
September—			4 days	0 in.	60 pts.
11th	..	0 44			
13th	..	0 7			
14th	..	0 3			
28th	..	0 45			
29th	..	0 6			
30th	..	0 7			
October—			6 days	1 in.	12 pts.
2nd	..	0 42			
14th	..	1 32			
15th	..	0 35			
23rd	..	0 14			
24th	..	0 75			
25th	..	0 59			
November—			6 days	3 in.	57 pts.
14th	..	0 22			
18th	..	0 13			
19th	..	0 75			
20th	..	1 37			
28th	..	0 94			
29th	..	1 0			
30th	..	0 7			
December—			7 days	4 in.	48 pts.
5th	..	0 35			
8th	..	0 18			
9th	..	0 40			
12th	..	0 15			
13th	..	0 40			
14th	..	0 62			
19th	..	0 22			
20th	..	0 18			
21st	..	0 7			
23rd	..	0 34			
24th	..	0 8			
25th	..	0 6			
28th	..	1 82			
			13 days	4 in.	87 pts.
Total for year 1927 ..			82 days	46 in.	31 pts.



## Appendix D—continued.

ROSEBANK RAINFALL RECORDS—continued.			Date.	Rainfall.	Total.		
DAILY RAINFALL—continued.				In. Pts.			
1928.			June—				
Date.	Rainfall.	Total.	6th	.. .. 0 18			
In. Pts.			13th	.. .. 0 42			
January—			14th	.. .. 0 69			
9th	.. .. 0 3		20th	.. .. 0 18			
11th	.. .. 0 28		21st	.. .. 0 7			
13th	.. .. 0 50		24th	.. .. 0 25			
16th	.. .. 0 47		25th	.. .. 0 42			
17th	.. .. 0 9		26th	.. .. 0 27			
18th	.. .. 0 11		29th	.. .. 0 50			
20th	.. .. 1 25		30th	.. .. 0 15			
25th	.. .. 0 5			10 days 3 in. 13 pts.			
26th	.. .. 0 5		July—				
27th	.. .. 0 4		17th	.. .. 0 25			
28th	.. .. 0 50		25th	.. .. 0 16			
29th	.. .. 0 13			2 days 0 in. 41 pts.			
30th	.. .. 0 24		August—	Nil.			
31st	.. .. 1 16		September—				
	14 days 4 in. 90 pts.		13th	.. .. 0 10			
February—				1 day 0 in. 10 pts.			
1st	.. .. 0 25		October—				
6th	.. .. 0 76		16th	.. .. 0 4			
7th	.. .. 0 6		19th	.. .. 0 11			
8th	.. .. 1 28		28th	.. .. 0 17			
9th	.. .. 0 50			3 days 0 in. 32 pts.			
10th	.. .. 1 33		November—				
11th	.. .. 0 34		2nd	.. .. 0 10			
12th	.. .. 0 23		6th	.. .. 1 94			
15th	.. .. 4 94		13th	.. .. 0 8			
17th	.. .. 1 95		20th	.. .. 0 65			
19th	.. .. 1 68		23rd	.. .. 0 7			
20th	.. .. 0 39			5 days 2 in. 84 pts.			
21st	.. .. 0 22		December—				
22nd	.. .. 0 16		4th	.. .. 0 9			
23rd	.. .. 0 80		5th	.. .. 0 23			
24th	.. .. 0 33		8th	.. .. 0 97			
25th	.. .. 0 4		19th	.. .. 0 4			
26th	.. .. 1 80		20th	.. .. 1 0			
27th	.. .. 0 24		22nd	.. .. 0 4			
29th	.. .. 0 8		23rd	.. .. 0 2			
	20 days 17 in. 38 pts.		24th	.. .. 0 24			
March—			25th	.. .. 0 35			
1st	.. .. 0 20		31st	.. .. 0 14			
2nd	.. .. 0 27			10 days 3 in. 12 pts.			
3rd	.. .. 0 13		Total for year 1928	85 days 45 in. 21 pts.			
6th	.. .. 0 17						
7th	.. .. 0 4						
28th	.. .. 0 9						
29th	.. .. 0 12						
30th	.. .. 0 30						
	8 days 1 in. 32 pts.						
April—							
3rd	.. .. 0 10						
4th	.. .. 0 5						
7th	.. .. 0 3						
16th	.. .. 0 7						
18th	.. .. 0 22						
19th	.. .. 0 89						
20th	.. .. 4 8						
21st	.. .. 0 93						
22nd	.. .. 2 94						
23rd	.. .. 2 0						
24th	.. .. 0 4						
	11 days 11 in. 35 pts.						
May—							
29th	.. .. 0 34						
	1 day 0 in. 34 pts.						

1929.		
January—		
12th	.. .. 1 30	
20th	.. .. 6 20	
21st	.. .. 3 11	
23rd	.. .. 0 6	
25th	.. .. 0 20	
	5 days 10 in. 87 pts.	
February—		
7th	.. .. 0 32	
8th	.. .. 2 18	
9th	.. .. 0 16	
10th	.. .. 0 10	
11th	.. .. 0 10	
12th	.. .. 0 83	
17th	.. .. 0 61	
18th	.. .. 0 39	
20th	.. .. 1 88	
21st	.. .. 4 29	
22nd	.. .. 1 10	
23rd	.. .. 1 19	
24th	.. .. 0 14	
	13 days 13 in. 29 pts.	

## Appendix E.

## UPPER BURNETT AND CALLIDE LAND SETTLEMENT AREA.

## WATER FACILITIES PROVIDED IN TERMS OF "THE UPPER BURNETT AND CALLIDE LAND SETTLEMENT ACT OF 1923."

Name of Selector.	Portion.	Parish.	Area.	Cost of Bore or Well.	Cost of Bore or Well charged to Selector.	Cost of Equipment (charged selector).
			A. R. P.	£ s. d.	£ s. d.	£ s. d.
E. N. Johnson .. ..	136	Prairie ..	366 1 0	94 8 2	94 8 2	168 11 11
A. J. Mack .. ..	130 and 130A	Bailey ..	191 0 0	53 12 2	53 12 2	96 16 5
E. J. Power .. ..	141	ditto ..	498 3 0	180 15 7	180 15 7	201 3 4
D. D. Spicer .. ..	11	Cannindah ..	316 2 0	42 6 6	42 6 6	119 0 11
F. Spencer .. ..	22	Prairie ..	188 3 0	87 16 10	87 16 10	165 0 4
S. F. Anderson .. ..	23	ditto ..	195 2 20	66 10 3	66 10 3	..
T. G. Iredale .. ..	53	ditto ..	283 2 33	57 16 8	57 16 8	..
T. J. Malone .. ..	138	Bailey ..	430 2 30	51 0 7	51 0 7	115 11 0
J. C. Malone .. ..	133 and 133A	ditto ..	338 0 20	35 15 3	35 15 3	123 8 5
P. G. Tollemache .. ..	56	Scoria ..	171 0 20	43 11 10	43 11 10	161 17 10
F. A. Tollemache .. ..	55	ditto ..	168 0 0	60 12 0	60 12 0	160 0 6
A. O. Gehrke .. ..	25	Kooingal ..	160 0 0	64 2 0	64 2 0	141 11 1
D. S. Malone .. ..	139	Bailey ..	429 0 20	65 10 1	65 10 1	..
J. Packham .. ..	13	Cannindah ..	251 0 20	233 1 3	Nil, failure.	..
				102 6 6	102 6 6	171 16 10
T. P. Rigney .. ..	24	ditto ..	509 2 10	44 12 3	44 12 3	119 18 10
S. Southwell .. ..	83	Bailey ..	293 0 0	56 9 9	56 9 9	123 14 6
W. G. Landgren .. ..	59 and 59A	ditto ..	214 0 20	158 0 9	158 0 9	..
E. D. Spletter .. ..	28	ditto ..	223 3 0	67 16 7	67 16 7	161 18 7
A. H. Adams .. ..	42	ditto ..	239 2 10	189 19 9	189 19 9	181 0 10
H. A. L. McKean .. ..	29	ditto ..	225 3 0	78 18 2	78 18 2	133 11 0
H. S. Spencer .. ..	58	Scoria ..	167 2 0	48 2 4	48 2 4	137 15 6
H. S. Kelly .. ..	25	Bailey ..	229 2 20	63 7 8	63 7 8	144 12 3
J. A. Coster .. ..	203	Prairie ..	170 2 0	55 2 8	55 2 8	198 11 0
T. Malone .. ..	134 and 134A	Bailey ..	334 0 20	121 10 0	Nil, failure.	..
				44 16 3	44 16 3	..
T. G. Cameron .. ..	120	Spier ..	484 3 10	83 11 9	83 11 9	156 5 3
J. P. Cronin .. ..	149	Prairie ..	509 1 0	43 0 9	43 0 9	139 12 6
B. C. P. Waine .. ..	137	ditto ..	366 2 0	41 0 6	41 0 6	160 17 4
H. C. Exeter .. ..	34	Spier ..	272 0 20	35 16 3	35 16 3	187 4 7
F. O. W. Burchardt .. ..	41	Prairie ..	195 0 20	26 8 4	26 8 4	..
H. E. Feldhahn .. ..	17	Spier ..	214 2 0	32 1 6	32 1 6	117 14 11
T. McLennan .. ..	54	Scoria ..	173 1 0	101 3 10	101 3 10	150 4 8
W. C. Paroz .. ..	40	Prairie ..	190 0 0	31 19 11	31 19 11	152 18 3
G. B. Showery .. ..	41	Spier ..	221 2 10	87 0 0	87 0 0	138 6 5
A. G. T. Bate .. ..	97	Bailey ..	259 1 0	35 7 4	35 7 4	155 10 1
G. E. Hodgetts .. ..	43	Spier ..	225 2 30	83 4 6	83 4 6	..
A. A. Russell .. ..	19	Scoria ..	183 0 0	75 13 7	75 13 7	146 14 11
M. Behrendorff .. ..	16	Prairie ..	411 2 20	76 7 8	76 7 8	152 8 9
W. N. Perry .. ..	46	ditto ..	453 1 30	30 2 2	30 2 2	..
E. W. Russell .. ..	22	Scoria ..	165 3 20	59 19 6	59 19 6	135 18 4
H. J. Stone .. ..	54	Bundalba ..	296 1 24	100 16 9	100 16 9	..
T. Payne .. ..	85	Bailey ..	268 3 0	33 19 0	33 19 0	140 6 8
G. R. Cox .. ..	98	ditto ..	270 2 0	26 9 5	26 9 5	..
B. Russell .. ..	21	Scoria ..	168 0 0	49 3 1	49 3 1	138 10 4
A. H. Russell .. ..	23	ditto ..	166 2 0	55 14 5	55 14 5	..
R. A. Tognolini .. ..	33	Prairie ..	210 2 30	87 3 4	87 3 4	186 9 8
E. A. Russell .. ..	20	Scoria ..	182 2 0	59 0 3	59 0 3	144 18 8
C. F. V. Schmidt .. ..	26	Clonmel ..	848 2 20	106 5 9	106 5 9	173 17 2
E. J. Basson .. ..	27	Bailey ..	226 3 0	111 16 7	111 16 7	..
W. Cronin .. ..	150	Prairie ..	187 3 0	89 5 10	89 5 10	..
A. C. Morante .. ..	132 and 132A	Bailey ..	118 3 10	39 18 0	Nil, failure.	..
				73 14 9	73 14 9	..
W. H. E. L'Estrange .. ..	48	Prairie ..	393 2 30	87 19 0	87 19 0	165 9 8
T. P. O'Donovan .. ..	84	Coppin ..	559 1 0	40 18 1	40 18 1	141 4 4
L. J. Russell .. ..	181	Prairie ..	190 0 0	72 12 10	72 12 10	136 7 4
H. J. Walter .. ..	48	Clonmel ..	355 1 0	59 1 1	59 1 1	219 6 4
H. B. Ridge .. ..	14	Scoria ..	162 2 0	75 10 5	75 10 5	143 18 5
J. F. King .. ..	5	Cannindah ..	482 1 30	135 11 1	135 11 1	..
J. H. Behrendorff .. ..	19	Prairie ..	229 1 20	79 17 0	79 17 0	140 1 1
A. A. F. Bainbrigge .. ..	179	ditto ..	336 2 30	121 7 4	121 7 4	172 18 3
T. O'Brien .. ..	68	ditto ..	318 0 0	83 3 0	83 3 0	143 16 1
T. J. Anderson .. ..	21	ditto ..	201 3 20	82 6 9	82 6 9	..
H. E. A. I'Estrange .. ..	45	Spier ..	223 3 20	87 4 2	87 4 2	..
M. Van Itallie .. ..	24	Prairie ..	222 2 20	70 13 7	70 13 7	145 3 8
T. A. Blackburn .. ..	12	Scoria ..	166 0 0	70 8 9	70 8 9	..
N. H. Robertson .. ..	174	Prairie ..	313 2 0	88 19 0	88 19 0	..
A. E. Baldwin .. ..	17	Cannindah ..	296 0 0	66 13 4	66 13 4	139 6 11
H. F. Kaden .. ..	12	ditto ..	313 2 20	43 11 0	43 11 0	..
D. J. Hanvin .. ..	124 and 124A	Bailey ..	243 2 0	92 0 1	Nil, failure.	..
				44 0 0	44 0 0	179 15 4
R. Evans .. ..	58	ditto ..	291 2 0	95 18 11	95 18 11	164 19 8
C. J. Cluff .. ..	76	ditto ..	472 2 0	70 3 8	70 3 8	132 15 8
B. Cavanagh .. ..	125 and 125A	ditto ..	217 2 1	35 0 5	35 0 5	..
T. Hungerford .. ..	140	Prairie ..	1,031 2 0	79 3 10	79 3 10	170 14 0
J. J. M. Davidson .. ..	105	Selene ..	176 3 0	383 5 10	234 7 8	211 6 9
S. Esposito and V. Zangari .. ..	34	Prairie ..	223 0 0	73 2 6	73 2 6	196 2 2
J. W. Harris .. ..	1	Clonmel ..	444 1 0	65 9 8	65 9 8	138 16 11
D. J. Hanvin, junr. .. ..	116	Bailey ..	25 1 26	55 18 6	55 18 6	162 10 5
H. D. O'Beirne .. ..	137 and 137A	ditto ..	298 2 0	38 12 5	38 12 5	..
T. Dent .. ..	11V	Clonmel ..	327 0 0	45 14 5	45 14 5	193 16 7

## Appendix E—continued.

## UPPER BURNETT AND CALLIDE LAND SETTLEMENT AREA—continued.

Name of Selector.	Portion.	Parish.	Area.	Cost of Bore or Well.	Cost of Bore or Well charged to Selector.	Cost of Equipment (charged Selector).
			A. R. P.	£ s. d.	£ s. d.	£ s. d.
J. T. Cluff .. ..	147	Bailey ..	313 0 0	90 6 10	90 6 10	134 19 4
C. R. Ridgway .. ..	115	ditto ..	24 2 0	41 1 8	41 1 8	138 8 6
N. J. Ridgway .. ..	114	ditto ..	28 0 20	37 15 4	37 15 4	131 16 8
J. Cooper .. ..	55	Bundalba ..	304 3 0	219 4 3	219 4 3	221 10 11
T. Daft .. ..	20	Coppin ..	323 2 0	53 2 6	53 2 6	136 19 9
J. Fraser .. ..	130	ditto ..	341 2 0	48 17 4	48 17 4	153 15 2
T. H. Harrison .. ..	129	ditto ..	343 2 0	33 1 1	33 1 1	163 16 0
J. K. Mouatt .. ..	4	Clonmel ..	573 1 0	49 2 11	49 2 11	147 2 7
G. Robertson .. ..	53	Bundalba ..	315 1 4	134 3 6	134 3 6	163 16 6
A. D. Cook .. ..	49	Scoria ..	207 0 0	98 15 10	98 15 10	172 16 9
J. H. Ninness .. ..	90	Prairie ..	209 1 0	92 17 8	92 17 8	194 13 8
F. W. Boon .. ..	29	Scoria ..	176 3 0	61 18 11	61 18 11	..
W. J. Green .. ..	50	Bundalba ..	290 2 0	48 19 7	48 19 7	..
A. Chandler .. ..	17	Prairie ..	397 0 0	338 15 9	264 9 0	..
F. W. Hardwick .. ..	13	Scoria ..	159 0 10	74 16 7	74 16 7	139 19 7
W. B. Stephens .. ..	27	Prairie ..	163 0 0	98 15 0	98 15 0	..
A. Grant .. ..	15	Scoria ..	155 0 0	87 17 0	87 17 0	137 7 0
J. W. Kurtz .. ..	24	ditto ..	168 3 20	90 2 0	90 2 0	145 7 9
A. H. Morrison .. ..	94	Bailey ..	401 1 20	55 14 1	55 14 1	139 12 11
F. L. Manthey .. ..	55	Prairie ..	316 1 11	65 6 4	65 6 4	..
M. McInerney .. ..	200	ditto ..	160 0 30	112 12 9	112 12 9	138 3 8
W. H. Prior .. ..	166	Selene ..	150 2 10	219 18 7	219 18 7	176 4 2
A. H. Bulow .. ..	103	ditto ..	149 0 30	487 19 3	300 0 0	192 0 5
C. F. Goode .. ..	89	Bailey ..	619 2 0	63 14 5	63 14 5	145 18 3
E. D. Byrne .. ..	110	ditto ..	26 0 20	38 11 6	38 11 6	..
F. D. Elliott .. ..	36	Prairie ..	216 0 0	177 12 2	177 12 2	168 1 4
T. Martin .. ..	104	ditto ..	227 2 20	147 13 9	147 13 9	185 10 0
D. Nicholson .. ..	67	Bailey ..	291 0 0	73 12 11	73 12 11	151 9 1
F. N. Walker .. ..	37	Prairie ..	223 2 20	47 18 2	47 18 2	124 10 10
A. McDermid .. ..	63 and 63A	Bailey ..	228 2 10	73 16 4	Nil, failure.	..
L. H. Behrendorff .. ..	20	Prairie ..	211 0 30	50 7 11	50 7 11	173 17 10
L. Harold .. ..	129	ditto ..	228 3 26	123 9 9	123 9 9	139 5 9
F. C. Rideout .. ..	67	ditto ..	325 0 20	83 3 9	83 3 9	193 6 2
R. S. Sutton .. ..	47	Spier ..	256 3 0	146 9 2	Nil, failure.	94 9 0
C. A. A. Timm .. ..	52	Prairie ..	278 1 0	64 3 1	64 3 1	140 7 4
H. H. C. Patullo .. ..	201	ditto ..	159 1 10	66 16 8	66 16 8	..
J. Maguire .. ..	34	Scoria ..	182 0 0	161 9 4	161 9 4	..
L. A. Walsh .. ..	16	ditto ..	187 2 0	95 17 11	95 17 11	139 8 3
B. Maguire .. ..	37	ditto ..	289 2 30	94 1 11	94 1 11	..
B. J. Timm .. ..	35	Prairie ..	203 2 0	102 19 2	102 19 2	144 11 1
J. M. Hickey .. ..	157	ditto ..	195 0 0	81 0 7	81 0 7	132 17 9
H. Chapman .. ..	24	Kooingal ..	157 0 0	171 8 10	171 8 10	..
A. Jones .. ..	44	Spier ..	211 1 0	107 6 1	107 6 1	155 9 1
P. Moore .. ..	93 and 93A	Bailey ..	237 2 20	102 18 5	102 18 5	151 17 0
F. Peace .. ..	17	Scoria ..	177 2 0	24 19 10	24 19 10	..
J. V. Ryan .. ..	128 and 128A	Bailey ..	210 1 4	114 1 0	114 1 0	..
A. E. Balchin .. ..	60	Scoria ..	188 0 0	83 2 2	83 2 2	..
H. Houreld .. ..	17	Coppin ..	295 3 0	246 1 5	114 1 6	189 14 8
S. H. Moore .. ..	96	Bailey ..	244 0 0	230 0 4	Nil, failure.	..
T. Coulson .. ..	58	Coppin ..	325 1 0	51 16 4	51 16 4	190 14 8
A. S. Meharry .. ..	30	Coppin ..	335 0 0	55 3 0	55 3 0	..
R. M. Boon .. ..	30	Scoria ..	222 3 0	90 12 1	90 12 1	199 19 2
A. N. Short .. ..	19	Tellebang ..	161 0 30	65 16 7	65 16 7	140 11 3
G. K. Stewart .. ..	136	Bailey ..	809 0 0	66 4 11	66 4 11	125 5 9
P. Miller .. ..	116	Prairie ..	179 2 20	300 0 0	300 0 0	357 10 7
H. H. Mathison .. ..	81	Coppin ..	357 2 0	67 18 10	67 18 10	162 14 8
F. I. Ninness .. ..	93	Prairie ..	262 0 0	85 3 7	85 3 7	163 18 1
G. W. Naldrett .. ..	90	Coppin ..	335 1 30	44 9 1	44 9 1	145 14 2
F. Randall .. ..	49	Bundalba ..	244 2 0	102 7 5	102 7 5	35 3 10
G. B. Marshall .. ..	60 and 60A	Bailey ..	239 2 0	41 1 3	41 1 3	206 16 0
G. B. Mouatt .. ..	5	Clonmel ..	591 1 0	69 19 2	69 19 2	..
J. Hill .. ..	39	Kooingal ..	201 3 0	63 12 11	63 12 11	146 14 9
R. W. Rimmer .. ..	49	Clonmel ..	345 0 20	38 5 6	38 5 6	201 1 0
E. D. M. Jackson .. ..	22	Clonmel ..	401 1 0	43 10 1	43 10 1	142 17 11
A. H. Williams .. ..	65	Don ..	319 2 20	40 3 3	40 3 3	138 17 10
T. E. Lord .. ..	124	Selene ..	227 3 20	47 13 1	47 13 1	141 18 1
P. Ashton .. ..	8	ditto ..	343 1 10	206 10 2	Nil, failure.	..
G. R. Anderson .. ..	91	Prairie ..	210 0 0	103 6 5	Nil, failure.	..
H. J. Thompson .. ..	8	Coppin ..	291 2 0	147 18 4	147 18 4	..
A. J. Petersen .. ..	40	Earlsfield ..	222 0 0	137 5 6	137 5 6	173 15 9
J. Taylor .. ..	108	Prairie ..	362 2 0	136 16 3	136 16 3	201 2 3
G. J. Brock .. ..	169	Bundalba ..	298 0 3	67 4 2	67 4 2	217 14 8
P. Kennedy .. ..	21	Earlsfield ..	365 0 0	228 7 3	Nil, failure.	..
A. Schunemann .. ..	197	Prairie ..	304 1 20	55 16 8	55 16 8	207 19 6
R. Fulloon .. ..	25	Clonmel ..	880 3 0	42 0 4	42 0 4	188 7 5
J. Higgin .. ..	120	Bailey ..	255 1 20	193 13 10	153 14 0	..
G. Weston .. ..	124	Prairie ..	196 0 0	238 14 6	238 14 6	224 1 6
				39 15 6	39 15 6	..
				77 11 11	77 11 11	..
				53 12 10	53 12 10	..
				341 7 7	178 2 9	164 16 0
				86 14 6	86 14 6	..



## Appendix E—continued.

## UPPER BURNETT AND CALLIDE LAND SETTLEMENT AREA—continued.

Name of Selector.	Portion.	Parish.	Area.	Cost of Bore or Well.	Cost of Bore or Well charged to Selector.	Cost of Equipment (charged Selector).
			A. R. P.	£ s. d.	£ s. d.	£ s. d.
H. N. Jones .. .. .	32	Scoria ..	206 2 0	73 15 0	73 15 0	138 14 5
A. J. Skinner .. .. .	25	Prairie ..	220 3 20	74 13 9	74 13 9	..
J. H. Ralph .. .. .	113	Earlsfield ..	252 2 0	87 9 3	87 9 3	142 7 8
E. F. Schunemann .. ..	195	Prairie ..	304 2 10	38 8 2	38 8 2	147 2 2
G. C. Green .. .. .	22	Coppin ..	385 2 0	131 8 7	78 0 0	85 17 6
J. Blaney .. .. .	72	Prairie ..	282 1 20	40 12 0	40 12 0	197 6 8
J. McNamara .. .. .	161	ditto ..	242 3 0	86 2 3	86 2 3	..
S. Ogle .. .. .	18	Bailey ..	255 2 10	413 0 8	400 0 0	..
Q. F. Bleys .. .. .	77	ditto ..	470 0 0	75 15 11	75 15 11	131 6 6
J. B. Loginoff .. .. .	3	Kroombit ..	276 0 0	70 13 8	70 13 8	139 18 9
A. Baldwin .. .. .	16	Cannindah ..	247 1 10	115 19 4	115 19 4	..
S. N. Dmitrieff .. .. .	156	Prairie ..	233 0 0	29 14 11	29 14 11	143 9 8
F. Graham .. .. .	4	Bailey ..	219 0 10	237 6 7	237 6 7	..
A. Evans .. .. .	21	Kroombit ..	443 0 0	58 4 3	58 4 3	..
A. G. Dougall .. .. .	16	Coppin ..	307 1 0	47 15 1	47 15 1	..
M. McGee .. .. .	122	Bailey ..	208 3 0	41 17 5	41 17 5	..
G. V. N. Gooch .. .. .	50	Clonmel ..	360 3 0	40 10 4	40 10 4	130 3 2
E. A. Ewald .. .. .	122	Prairie ..	200 0 0	68 15 5	68 15 5	..
G. W. Nicholson .. .. .	175	ditto ..	319 3 30	71 4 5	71 4 5	179 8 0
R. E. Chetter .. .. .	18	Spier ..	250 1 30	90 13 1	90 13 1	155 4 6
J. F. Simpson .. .. .	62	Scoria ..	186 1 0	41 3 3	41 3 3	144 4 10
K. G. Banks .. .. .	95	Bailey ..	315 0 0	74 12 8	Nil, failure.	..
				219 5 10	219 5 10	..
P. J. Meagher .. .. .	78	ditto ..	471 0 0	59 7 0	59 7 0	..
J. Gillies .. .. .	134	Earlsfield ..	189 2 0	88 17 6	88 17 6	..
J. McInnes .. .. .	93	Coppin ..	334 0 20	61 18 5	61 18 5	171 0 0
F. Mazzer .. .. .	20	Kooingal ..	210 3 0	43 12 2	43 12 2	238 2 10
J. Logan .. .. .	11	Bailey ..	236 2 0	495 11 11	300 0 0	..
A. Millard .. .. .	24	Clonmel ..	486 0 0	43 12 2	43 12 2	131 9 9
C. W. Anders .. .. .	121	Prairie ..	206 1 0	233 9 4	121 4 3	..
G. C. F. Staatz .. .. .	46	Coppin ..	335 0 0	80 14 7	80 14 7	206 5 7
C. Beaton .. .. .	23	Clonmel ..	399 0 0	53 15 7	53 15 7	..
J. B. Higgins .. .. .	14	Spier ..	237 3 10	72 6 0	72 6 0	134 8 8
E. Wells .. .. .	66	Coppin ..	342 0 0	71 7 9	71 7 9	155 2 9
C. O. Brown .. .. .	115	Prairie ..	254 2 20	209 18 1	128 11 8	..
A. Kung .. .. .	54	ditto ..	312 0 0	35 7 3	35 7 3	..
N. W. Smith .. .. .	6	Clonmel ..	598 3 0	56 2 3	56 2 3	..
E. Hall .. .. .	90 and 90A	Bailey ..	241 3 0	54 1 5	54 1 5	145 6 4
W. A. Gray .. .. .	123	Prairie ..	187 2 0	41 19 10	41 19 10	212 19 9
A. Fraser .. .. .	82	Coppin ..	517 3 0	42 16 3	42 16 3	..
T. V. W. Newton .. .. .	94	Prairie ..	254 1 0	78 3 10	78 3 10	188 10 5
P. M. Sheehan .. .. .	7	Cannindah ..	496 2 20	47 12 6	47 12 6	..
M. Wynne .. .. .	8	Kroombit ..	373 3 20	60 15 3	60 15 3	149 14 11
G. H. Ezard .. .. .	152	Prairie ..	546 1 0	60 17 6	60 17 6	149 17 9
G. Spence .. .. .	64	ditto ..	302 0 20	43 1 5	43 1 5	161 3 5
D. Gorman .. .. .	7	Coppin ..	293 1 0	121 2 1	121 2 1	237 13 10
H. M. Baynton .. .. .	28	Kooingal ..	159 2 20	50 1 6	50 1 6	..
J. Byrne .. .. .	119	Selene ..	173 3 10	319 14 3	319 14 3	266 11 7
J. W. Woods .. .. .	37	Spier ..	166 2 0	54 4 10	54 4 10	153 2 8
G. A. Elliott .. .. .	9	Coppin ..	296 2 0	95 14 2	95 14 2	..
N. F. Robinson .. .. .	151	Prairie ..	252 3 20	73 6 7	73 6 7	..
W. Wilson .. .. .	10	Coppin ..	267 2 20	78 3 5	78 3 5	..
T. W. Robinson and E. H. Robinson .. .. .	102	Selene ..	195 3 0	148 2 9	148 2 9	238 18 11
N. S. King .. .. .	138	Prairie ..	402 2 0	49 0 4	49 0 4	221 13 9
R. T. Jubb .. .. .	192	ditto ..	496 2 0	85 16 5	85 16 5	183 4 7
A. T. Lynn .. .. .	101	Selene ..	202 0 0	155 12 4	155 12 4	..
J. M. Brady .. .. .	119	Spier ..	410 0 30	68 10 10	68 10 10	164 14 11
G. King, junr. .. .. .	42	Cannindah ..	322 3 0	70 13 11	70 13 11	..
L. A. Baldwin .. .. .	8	Cannindah ..	321 0 4	45 19 8	45 19 8	..
L. J. Cook .. .. .	43	Coppin ..	384 0 0	42 10 2	42 10 2	192 7 1
C. Cuff .. .. .	5	ditto ..	302 2 0	79 2 1	79 2 1	209 16 8
H. C. Hansen .. .. .	81	Bailey ..	278 0 0	67 18 5	67 18 5	..
M. T. Jubb .. .. .	191	Prairie ..	601 0 0	77 9 5	77 9 5	..
F. G. Dahtler .. .. .	11	Clonmel ..	579 3 0	48 5 5	48 5 5	..
P. J. Hughes .. .. .	20	Selene ..	899 2 0	94 15 4	94 15 4	..
A. P. Woodford .. .. .	89	ditto ..	262 3 20	148 9 4	148 9 4	..
J. W. Piggott .. .. .	24	Bailey ..	228 2 0	201 12 8	201 12 8	..
S. McCarthy .. .. .	196	Prairie ..	304 1 20	93 11 1	93 11 1	..
R. Hardwick .. .. .	144	ditto ..	733 0 0	224 11 0	Nil, failure.	..
				113 2 8	Nil, failure.	..
				249 4 6	249 4 6	..
F. G. Dahtler, junr. .. ..	15	Clonmel ..	694 1 0	49 7 1	49 7 1	..
H. Kent .. .. .	100	Coppin ..	316 0 20	273 15 8	273 15 8	..
H. G. Waine .. .. .	118	Prairie ..	171 2 0	60 0 9	60 0 9	..
W. F. Humphries .. .. .	145	Bailey ..	368 1 0	78 14 6	78 14 6	..
W. T. W. Neill .. .. .	37	Earlsfield ..	192 3 0	Provided	own facility.	188 14 0
F. D. Behrendorff .. .. .	18	Prairie ..	317 0 0	Provided	own facility.	130 4 7
G. W. Taylor .. .. .	199	Prairie ..	304 1 10	235 16 7	235 16 7	..
A. C. Baynton .. .. .	32	Kooingal ..	180 2 7	51 14 5	51 14 5	..

## Appendix E—continued.

UPPER BURNETT AND CALLIDE LAND SETTLEMENT AREA—continued.  
COMMON WATER SUPPLIES.

Name of Selector.	Portion.	Parish.	Area.	Cost of Bore or Well.	Cost of Bore or Well charged to Selector.	Cost of Equipment (charged Selector).
			A. R. P.	£ s. d.	£ s. d.	£ s. d.
J. H. Daly .. ..	7	Bailey ..	217 1 1	} 298 11 9	} 298 11 9	} 482 9 4
D. Chapman .. ..	6	ditto ..	226 1 0			
J. Emery .. ..	45	ditto ..	169 0 20			
A. B. Horn .. ..	46	ditto ..	169 1 0	} 57 15 8	} 57 15 8	} 269 11 2
J. W. Fleming .. ..	133	Prairie ..	541 3 37			
J. P. Fleming .. ..	134	ditto ..	373 0 21			
W. H. White .. ..	108	Selene ..	160 2 0	} 166 12 1	} 166 12 1	} ..
F. Holz .. ..	107	ditto ..	154 3 20			
S. Woolley .. ..	17	Bailey ..	250 2 19			
A. N. Lennox .. ..	10	ditto ..	238 1 39	} 497 15 8	} 497 15 8	} Not com- pleted.
M. Kannar .. ..	34	ditto ..	232 1 10			
F. O. Griffith .. ..	35	ditto ..	240 0 10			
N. M. Roe .. ..	105	Coppin ..	323 0 30	} 150 0 0	} 150 0 0	} Not com- pleted.
W. J. Evans .. ..	103	ditto ..	315 0 20			

**Appendix F.**  
**UNSUCCESSFUL BORES.**

Name of Selector.	Portion.	Parish.	Area.			Cost of Bore.		
			A.	R.	P.	£	s.	d.
E. J. McKenzie .. .. .	119	Bailey ..	333	3	0	437	1	2
F. C. Smith .. .. .	129	Selene ..	214	3	20	165	9	7
J. Packham .. .. .	13	Cannindah ..	251	0	20	174	0	0
A. C. Morante .. .. .	132 and 132A	Bailey ..	118	3	10	233	1	3
T. Malone .. .. .	134 and 134A	ditto ..	334	0	20	39	18	0
R. P. Johnson .. .. .	99	Prairie ..	220	2	0	121	10	0
J. P. Fleming .. .. .	134	ditto ..	373	0	21	112	14	10
						144	19	10
						95	12	9
						182	3	4
						27	8	1
J. Errington .. .. .	117	Selene ..	230	3	0	208	0	9
D. J. Hanvin .. .. .	124 and 124A	Bailey ..	243	2	0	92	0	1
A. McDermid .. .. .	63 and 63A	ditto ..	228	2	10	73	16	4
A. H. Williams .. .. .	65	Don ..	319	2	20	206	10	2
						103	6	5
B. R. Thompson .. .. .	162	Prairie ..	328	2	0	275	2	10
H. Houreld .. .. .	17	Coppin ..	295	3	0	230	0	4
C. G. Skinner .. .. .	122	Spier ..	464	1	20	}	418	9
W. B. Stephens .. .. .	121	ditto ..	464	2	0			
R. S. Sutton .. .. .	47	ditto ..	256	3	0			
K. G. Banks .. .. .	95	Bailey ..	315	0	0	146	9	2
H. J. Barnes .. .. .	139	Prairie ..	960	1	0	74	12	8
						170	8	7
						283	19	10
R. Hardwick .. .. .	144	ditto ..	733	0	0	224	11	0
						113	2	8
H. J. Thompson .. .. .	8	Coppin ..	291	2	0	228	7	3
J. Johnson .. .. .	94	Earlsfield ..	323	3	0	266	19	10
J. H. Hutton .. .. .	24	Coppin ..	477	1	0	468	5	11
C. G. Skinner .. .. .	122	Spier ..	464	1	20	291	11	6
J. Curgenvin .. .. .	11	Coppin ..	283	0	0	167	3	5
M. J. Kindleysides .. .. .	2	Kroombit ..	452	1	30	163	13	5

**UNSUCCESSFUL BORES.**

**REASONS WHY BORES DECLARED FAILURES.**

F. C. SMITH .. .. .	Only 10 gallons per hour obtained at 315 ft.
E. J. MCKENZIE .. .. .	Bore sunk to depth of 486 ft. and flow of about 65 gallons per hour obtained. Selector claimed supply insufficient and, on advice of Commissioner of Irrigation, bore declared a failure.
E. J. MCKENZIE (No. 2 Site) ..	Boring difficulties met with at 190 ft. straightening up hole and extracting piece of torn casing. Site abandoned.
H. HOURELD .. .. .	Twenty-four gallons per hour obtained, 300 ft. Stratum at that level very hard and difficult to penetrate. Bore abandoned.
B. R. THOMSON .. .. .	Good supply obtained, but water certified by analyst as being "Usable by stock, but too hard and saline to be classed as a good stock water." In the meantime casing withdrawn by Irrigation Commission.
J. ERRINGTON .. .. .	Bore sunk to 300 ft. No water. Deepening was held in abeyance while a test bore was sunk in the locality. Good supply was struck in this test bore beyond the 300-ft. level. In the meantime selector had surrendered his selection. No further action was taken.
C. G. SKINNER .. .. .	Depth 350 ft. Very hard stratum (basalt and boulder formation) met with.
C. G. SKINNER and W. B. STEPHENS	Depth 601 ft. 6 in. in very hard strata. Ninety gallons per hour, or 2,160 gallons per day obtained at 287 ft. in fine sand. Water could not be separated from the fine sand. Bore sunk to 601 ft. 6 in., but no further supply of water struck. Strata very hard; bore abandoned.
A. H. WILLIAMS .. .. .	Depth 292 ft., impenetrable stratum met with. Site abandoned for substituted one.
A. H. WILLIAMS (No. 2 Site)	Depth 266 ft. Similar stratum as in first bore; site abandoned.
A. C. MORANTE .. .. .	Depth 111 ft. Supply 800 gallons per hour. Suitability of water for stock doubtful. Declared a failure.



UNSUCCESSFUL BORES—*continued.*REASONS WHY BORES DECLARED FAILURES—*continued.*

D. J. HANVIN .. ..	..	A supply of water struck at 197 ft. Very bitter and useless.
A. McDERMID .. ..	..	Three hundred and sixty gallons per hour of good water obtained in fine silt stratum. Unable to separate silt from water. Site abandoned for substituted one.
T. MALONE .. ..	..	Two hundred and fifty gallons per hour obtained at 300 ft. Suitability of water for stock doubtful. Declared a failure.
R. P. JOHNSON .. ..	..	Well 60 ft. Small soakage met with at that depth. Portion forfeited. To be deepened by boring when portion reselected.
R. S. SUTTON .. ..	..	Fifty gallons per hour met with at 253 ft. Supply inadequate. Deepened to 300 ft.; stratum soapstone. Site abandoned for substituted one.
K. G. BANKS .. ..	..	Depth 100 ft. 6 in. Boulders met with. Site abandoned for substituted one.
H. J. BARNES .. ..	..	Very hard stratum met with; depth 99 ft. 3 in
H. J. BARNES (No. 2) ..	..	Depth 175 ft. 3 in.; stratum granite.
J. H. HUTTON .. ..	..	Depth 612 ft.; stratum shale and limestone with layer of basalt. Site abandoned.
R. HARDWICK .. ..	..	Depth 97 ft. Hole crooked, preventing further sinking. Abandoned for substituted site.
R. HARDWICK (No. 2) ..	..	Depth 40 ft.; very hard stratum. Too costly to penetrate.
H. J. THOMPSON .. ..	..	Drill lost in bore hole at 297 ft. Efforts to recover unsuccessful. Site had to be abandoned and another located.
J. JOHNSON .. ..	..	Forty gallons per hour obtained at 610 ft. Water flowed over top of casing although only standing a test of 40 gallons per hour. Bore deepened to 630 ft., but supply not increased. Bore abandoned; supply insufficient.
M. J. KINDLEYSIDES ..	..	Two hundred gallons struck at 140 ft. in seam of fine sand. Impossible to finalise bore, as seam of sand was between slippery-back clays, choking water off. Water shut off and sinking continued. At 207 ft. 15 gallons per hour was obtained, and bore was continued to 345 ft. without striking further supply.
J. CURGENVEN .. ..	..	Depth 235 ft. Site abandoned owing to failure to remove obstruction—part of sinker bar and drill—in the hole. Small stream of 53 gallons per hour was met with at 87 ft., and drilling was continued to 235 ft. when driller had misfortune to loose tools in hole.
J. PACKHAM .. ..	..	Depth 118 ft. Exceptionally hard and difficult strata met with in bottom of bore. New site located.
J. P. FLEMING .. ..	..	Depth of facility, 300 ft.; well, 80 ft.; bore in bottom of well, 220 ft. Selector would not agree to further sinking. Site abandoned for substituted one.
J. P. FLEMING (No. 2) ..	..	Small stream of 10 gallons per hour struck at 235 ft. Prospects for better supply at greater depth appeared to be good. Granite struck at 380 ft. Boring continued to 390 ft. New site located.
J. P. FLEMING (No. 3) ..	..	Depth 108 ft. At 108 ft. no prospects of obtaining a supply at a greater depth. Site abandoned.

*Price, 3s. 3d.]*

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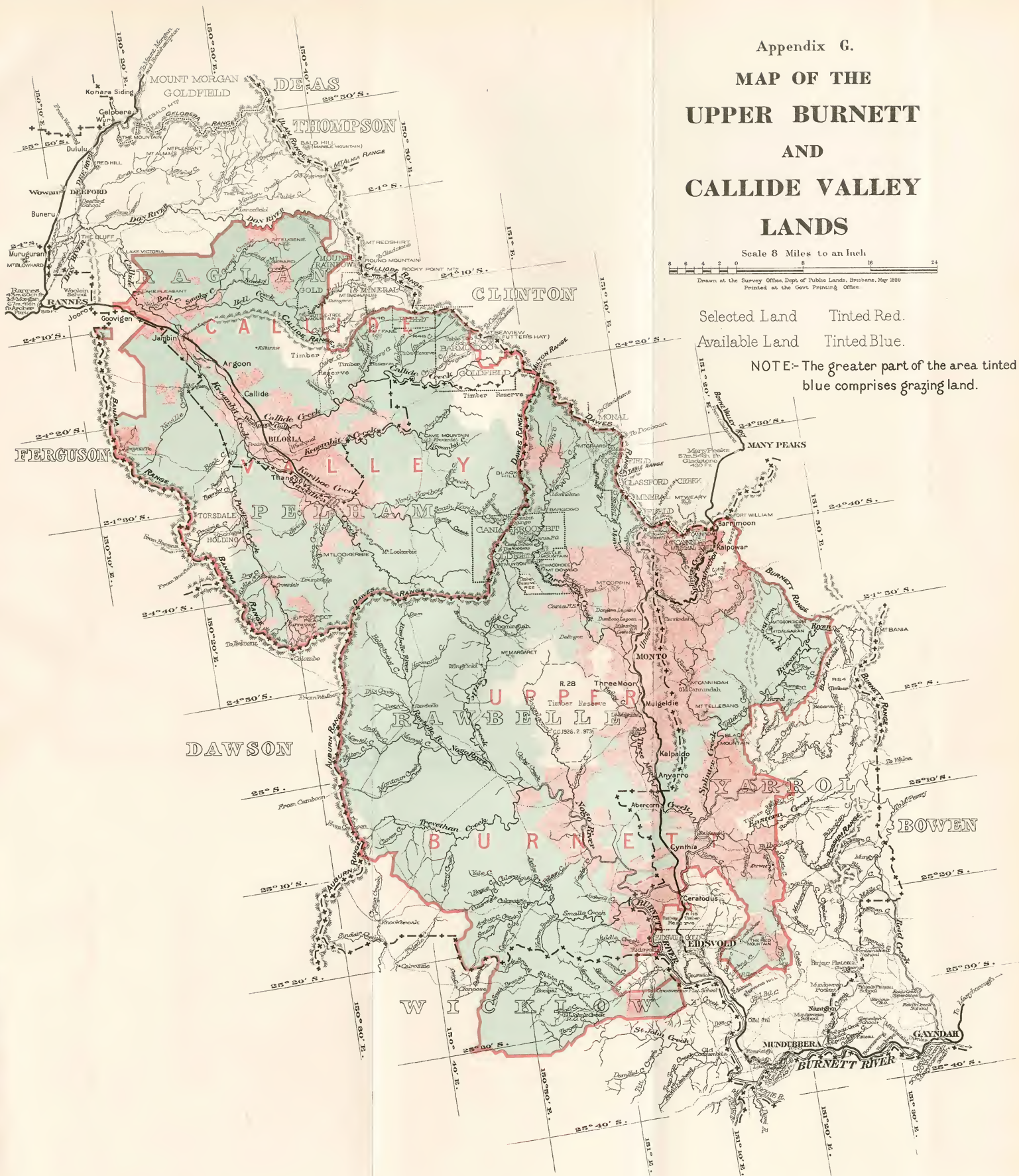
Appendix G.  
**MAP OF THE  
 UPPER BURNETT  
 AND  
 CALLIDE VALLEY  
 LANDS**

Scale 8 Miles to an Inch



Selected Land Tinted Red.  
 Available Land Tinted Blue.

NOTE:- The greater part of the area tinted blue comprises grazing land.





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